STIC Search Report
EIC 2100

STIC Database Tracking Number: 195037

TO:	From:
James Swiger, III **Location: RND 6c04** **Art Unit: 3733** **Friday, July 21, 2006** **Case Serial Number:** 10/679012	**Ruth E. Spink** **Location: EIC 2100** **RND-4B31** **Phone: 23524** **Ruth.spink@uspto.gov**

Search Notes

James– Attached is the inventor, foreign patent and NPL search for the above referenced case. I flagged the references that I think are the best. Be sure to contact me if you wish to refocus this search.

Ruth

Access DB# 195037

83

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: James Swiger Examiner #: 81582 Date: 7/9/06

Art Unit: 3733 Phone Number 30 2-5557 Serial Number: 10/679,012

Mail Box and Bldg/Room Location: 6C04 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

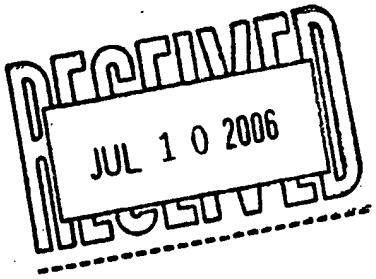
Title of Invention: Cervical Plate/Screw System for immobilizing vertebrae

Inventors (please provide full names): Nicholas Cordaro

Earliest Priority Filing Date: 10/3/2003

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

helical threads on rectangular core with semicircular ends



STIC Search Results Feedback Form

EIC 2100

Questions about the scope or the results of the search? Contact ***the EIC searcher or contact:***

Alyson Dill, EIC 2100 Team Leader
272-3527, RND 4B28

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 2133*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (Journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/EIC2100 RND, 4B28

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Set     Items   Description
S1          8   AU=(CORDARO, N? OR CORDARO N?)
S2          8   IDPAT (sorted in duplicate/non-duplicate order)
S3          7   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)
         (c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200645
         (c) 2006 The Thomson Corp.
File 348:EUROPEAN PATENTS 1978-2006/ 200629
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060713,UT=20060706
         (c) 2006 WIPO/Univentio
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3/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016146782 **Image available**
WPI Acc No: 2004-304658/200428
XRPX Acc No: N04-242638
Cervical plate system for fusing segments of human cervical spine, has threaded section with pitch matching helical track pitch in plate, and arranged so that when screw is threaded into opening screw is rotated relative to plate
Patent Assignee: CORDARO N M (CORD-I)
Inventor: **CORDARO N M**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040068319	A1	20040408	US 2002416225	P	20021004	200428 B
			US 2003679012	A	20031003	

Priority Applications (No Type Date): US 2002416225 P 20021004; US 2003679012 A 20031003
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040068319	A1		13	A61F-002/44	Provisional application US 2002416225

Abstract (Basic): US 20040068319 A1

NOVELTY - The system has a bone screw with a cylindrical head section of a diameter, an intermediate neck section of another diameter, and a depending thread section of third diameter. A threaded section has a pitch matching pitch of partial helical track in a plate (10).The threaded section is arranged so that when the screw is threaded completely into a plate opening (12) the screw is rotated relative to the plate.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a method to install a ring defining an internal thread for cooperation with a threaded cervical screw into the lower section within a circular opening of a cervical plate.

USE - Used for fusing segments of human cervical spine, and for stabilizing an interbody.

ADVANTAGE - The threaded section is arranged so that when the screw is threaded completely into the plate opening the screw is rotated relative to the plate without causing any axial movement between the screw and the plate, thereby providing a reliable and simple way for securing adjacent vertebrae bodies or interbody device during spine fusion.

DESCRIPTION OF DRAWING(S) - The drawing shows a top perspective view of a cervical plate with fixed, variable and dynamic screws and associated rings.

Plate (10)
Plate opening (12).
Fixed screw (42)
Variable screw (44)
Dynamic screw (46)
pp; 13 DwgNo 14/18

Title Terms: CERVIX; PLATE; SYSTEM; FUSE; SEGMENT; HUMAN; CERVIX; SPINE; THREAD; SECTION; PITCH; MATCH; HELICAL; TRACK; PITCH; PLATE; ARRANGE; SO; SCREW; THREAD; OPEN; SCREW; ROTATING; RELATIVE; PLATE
Derwent Class: P32
International Patent Class (Main): A61F-002/44
File Segment: EngPI

3/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

017021758 **Image available**
WPI Acc No: 2005-346075/200535
Related WPI Acc No: 2004-602059
XRPX Acc No: N05-282914

Surgical component set used in shoulder joint arthroplasty to reconstruct head of shoulder joint, has fixing peg which can be secured only with one of head and neck of joint, and spherical reamer operable to prepare surface of joint

Patent Assignee: CORDARO N M (CORD-I); STONE K T (STON-I)
Inventor: **CORDARO N M** ; STONE K T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20050107882	A1	20050519	US 2001308340	P	20010727	200535	B
			US 2002205386	A	20020725		
			US 2004930044	A	20040830		

Priority Applications (No Type Date): US 2001308340 P 20010727; US 2002205386 A 20020725; US 2004930044 A 20040830
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20050107882	A1		25	A61F-002/40	Provisional application US 2001308340
					CIP of application US 2002205386
					CIP of patent US 6783549

Abstract (Basic): US 20050107882 A1

NOVELTY - The fixing surface of a fixing component is secured to the fixing surface of the head portion (33) of a humeral component (31). The spherical surface of the fixing component includes a depending fixing peg (34) that can be secured only with one of the head and neck of a joint. A spherical reamer can be operated to prepare a surface of the joint.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(A) a humeral component implanting method; and

(B) a modular joint component.

USE - Used in a shoulder joint arthroplasty to reconstruct the head of a shoulder joint.

ADVANTAGE - Provides a stable and secure humeral component, and reduces the total amount of bone tissue required to be removed.

DESCRIPTION OF DRAWING(S) - The figure shows the perspective view of humeral component of surgical component set.

Humeral component (31)
Base portion (32)
Head portion (33)
Fixing peg (34)
Resected portion (36)
pp; 25 DwgNo 1/39

Title Terms: SURGICAL; COMPONENT; SET; SHOULDER; JOINT; ARTHROPLASTY; RECONSTRUCT; HEAD; SHOULDER; JOINT; FIX; PEG; CAN; SECURE; ONE; HEAD; NECK; JOINT; SPHERE; REAM; OPERATE; PREPARATION; SURFACE; JOINT
Derwent Class: P32
International Patent Class (Main): A61F-002/40
File Segment: EngPI

3/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016741300 **Image available**
WPI Acc No: 2005-065597/200507
XRPX Acc No: N05-056827

Transverse connector system for joining two spinal rods, has pin member retractably arranged within each pin receiving bore to capture spinal rods within rod receiving recesses on connector to rigidly join spinal rods to connector

Patent Assignee: CORDARO N M (CORD-I)
Inventor: **CORDARO N M**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20050010222	A1	20050113	US 2003483947	P	20030701	200507 B
			US 2004877667	A	20040624	

Priority Applications (No Type Date): US 2003483947 P 20030701; US 2004877667 A 20040624
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20050010222	A1		14	A61B-017/56	Provisional application US 2003483947

Abstract (Basic): US 20050010222 A1

NOVELTY - A pin member is retractably arranged within each pin receiving bore (18) to capture spinal rods within rod receiving recesses (14) on a connector (10) to rigidly join the spinal rods to the connector.

USE - For joining two spinal rods at desired spatial orientation.

ADVANTAGE - Ensures rigid joining of spinal rods since connector system is readily adjustable. Facilitates spinal fusion. Secures and maintains spinal rods in desired orientation.

DESCRIPTION OF DRAWING(S) - The figure shows the side view of a transverse connector system.

Connector (10)
End sections (12)
Rod receiving recesses (14)
Intermediate bridge section (16)
Pin receiving bore (18)
pp; 14 DwgNo 1/13

Title Terms: TRANSVERSE; CONNECT; SYSTEM; JOIN; TWO; SPINE; ROD; PIN; MEMBER; RETRACT; ARRANGE; PIN; RECEIVE; BORE; CAPTURE; SPINE; ROD; ROD; RECEIVE; RECESS; CONNECT; RIGID; JOIN; SPINE; ROD; CONNECT
Derwent Class: P31
International Patent Class (Main): A61B-017/56
File Segment: EngPI

3/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016444143 **Image available**
WPI Acc No: 2004-602059/200458
Related WPI Acc No: 2005-346075; 2006-066798
XRPX Acc No: N04-476038

Modular humeral component for use in shoulder arthroplasty, has peg having surface secured to fixation surface of head and spherical surface with fixation member secured within head or neck sections of humerus

Patent Assignee: BIOMET INC (BIOM-N)
Inventor: **CORDARO N M** ; STONE K T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6783549	B1	20040831	US 2001308340	P	20010727	200458	B
			US 2002205386	A	20020725		

Priority Applications (No Type Date): US 2001308340 P 20010727; US 2002205386 A 20020725
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6783549	B1		15	A61F-002/40	Provisional application US 2001308340

Abstract (Basic): US 6783549 B1

NOVELTY - The modular humeral component (30) includes a fixation peg having a surface adapted to be secured to the fixation surface of a head (36). The fixation peg also includes a spherical surface with a fixation member that is secured within the head or the neck sections of the humerus (38).

USE - For use in shoulder arthroplasty.

ADVANTAGE - Provides a stable and secure humeral component. Reduces the overall amount of bone tissue to be removed. Increases a surgeon's available components utilizing a single sized post. Reduces the overall surgical time and complexity. Increases and enhances post strength without increasing overall post diameter.

DESCRIPTION OF DRAWING(S) - The figure shows the cross sectional view of the implanted modular humeral component.

Modular humeral component (30)
Base (32)
Head (36)
Humerus (38)
Fixing screw (85)
pp; 15 DwgNo 15/28

Title Terms: MODULE; HUMERUS; COMPONENT; SHOULDER; ARTHROPLASTY; PEG; SURFACE; SECURE; FIX; SURFACE; HEAD; SPHERE; SURFACE; FIX; MEMBER; SECURE ; HEAD; NECK; SECTION; HUMERUS
Derwent Class: P32
International Patent Class (Main): A61F-002/40
File Segment: EngPI

3/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016395188 **Image available**
WPI Acc No: 2004-553097/200453
XRPX Acc No: N04-437646
Prosthetic components kit used in shoulder arthroplasty, has female holes individually provided at mounting portions and offset at unequal distances from stem pieces longitudinal axes
Patent Assignee: CORDARO N M (CORD-I); STONE K T (STON-I)
Inventor: **CORDARO N M** ; STONE K T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20040153161	A1	20040805	US 2003358079	A	20030204	200453	B

Priority Applications (No Type Date): US 2003358079 A 20030204
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040153161	A1		9	A61F-002/40	

Abstract (Basic): US 20040153161 A1
NOVELTY - The kit includes two humeral prostheses (10,50) individually provided with stem pieces formed with mounting portions (30,50) at the proximal ends. Female holes (52) are individually provided at the mounting portions, and offset at unequal distances from the stem pieces longitudinal axes (60).
USE - Used in shoulder arthroplasty.
ADVANTAGE - Ensures stable and secure attachment of humeral prostheses. Reduces overall amount of bone tissue to be removed during shoulder arthroplasty, thus reducing overall surgical time and simplifying procedure. Improves overall joint articulation, and increases natural articulation without increasing number of components.
DESCRIPTION OF DRAWING(S) - The figure shows the exploded isometric views of humeral prostheses, and isometric views of the coupling members.
Humeral prostheses (10,50)
Mounting portions (30,50)
Female holes (52)
Stem pieces longitudinal axes (60)
pp; 9 DwgNo 3, 4, 5, 6/10
Title Terms: PROSTHESIS; COMPONENT; KIT; SHOULDER; ARTHROPLASTY; FEMALE; HOLE; INDIVIDUAL; MOUNT; PORTION; OFFSET; UNEQUAL; DISTANCE; STEM; PIECE; LONGITUDE; AXIS
Derwent Class: P32
International Patent Class (Main): A61F-002/40
File Segment: EngPI

3/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015069793 **Image available**
WPI Acc No: 2003-130309/200312
XRPX Acc No: N03-103533

Modular shoulder prosthesis has adaptor relatively positionable on stem to provide adjustment, and readily positionable on head to provide second adjustment so as to couple head to stem in fixed orientation within range of orientations

Patent Assignee: BIOMET INC (BIOM-N); CORDARO N M (CORD-I); STONE K T (STON-I)
Inventor: **CORDARO N M** ; STONE K T
Number of Countries: 100 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200305933	A2	20030123	WO 2002US22040	A	20020711	200312 B
US 20030028253	A1	20030206	US 2001304651	P	20010711	200313
			US 2002192787	A	20020710	
AU 2002346103	A1	20030129	AU 2002346103	A	20020711	200452
US 20050197708	A1	20050908	US 2001304651	P	20010711	200559
			US 2002192787	A	20020710	
			US 2005120111	A	20050502	
US 6942699	B2	20050913	US 2001304651	P	20010711	200560
			US 2002192787	A	20020710	
AU 2002346103	A8	20051020	AU 2002346103	A	20020711	200615

Priority Applications (No Type Date): US 2002192787 A 20020710; US 2001304651 P 20010711; US 2005120111 A 20050502
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200305933	A2	E	15	A61F-000/00	
Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
US 20030028253	A1			A61F-002/40	Provisional application US 2001304651
AU 2002346103	A1			A61F-000/00	Based on patent WO 200305933
US 20050197708	A1			A61F-002/40	Provisional application US 2001304651
					Div ex application US 2002192787
US 6942699	B2			A61F-002/40	Provisional application US 2001304651
AU 2002346103	A8			A61F-002/40	Based on patent WO 200305933

Abstract (Basic): WO 2003005933 A2

NOVELTY - The prosthesis (20) has an adaptor (24) interposed between the proximal face of a stem (22) and the bottom surface of a humeral head (26). The adaptor (24) is relatively positionable on the stem (22) to provide a first adjustment, and readily positionable on the humeral head (26) to provide a second adjustment so as to couple the humeral head (26) to the stem (22) in a fixed orientation within a range of orientations defined by the two adjustments.

DETAILED DESCRIPTION - The adaptor (24) is eccentrically coupled to the stem (22) such that relative angular positioning of the adaptor (24) on the stem (22) will effect a first radial offset. The adaptor (24) is eccentrically coupled to the humeral head (26) such that relative angular positioning on the humeral head (26) will effect a second radial offset.

USE - For replacing and reconstructing a portion of a humerus.

Allows for total shoulder joint replacement.

ADVANTAGE - Readily adaptable to provide a range of geometric configurations, i.e. radial offsets of angular inclination while minimizing the number of components required.

DESCRIPTION OF DRAWING(S) - The figure shows an exploded front view of the modular shoulder prosthesis system.

Modular shoulder prosthesis (20)
Stem (22)
Adaptor (24)
Humeral head. (26)
pp; 15 DwgNo 1/13

Title Terms: MODULE; SHOULDER; PROSTHESIS; ADAPT; RELATIVELY; POSITION; STEM; ADJUST; READY; POSITION; HEAD; SECOND; ADJUST; SO; COUPLE; HEAD; STEM; FIX; ORIENT; RANGE; ORIENT
Derwent Class: P32
International Patent Class (Main): A61F-000/00; A61F-002/40
File Segment: EngPI

3/5/7 (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01555939
SHOULDER PROSTHESIS
PROTHESE D'EPAULE
PATENT ASSIGNEE:
BIOMET, INC., (1135681), Airport Industrial Park, P.O. Box 587, Warsaw, IN 46580, (US), (Applicant designated States: all)
INVENTOR:
STONE, Kevin, T., 2615 Harmony Lane, Winona Lake, IN 46590, (US)
CORDARO, Nicolas, M. , 1822 Mackinnon Ave., Cardiff by the Sea, CA 92007 , (US
PATENT (CC, No, Kind, Date):
WO 2003005933 030123
APPLICATION (CC, No, Date): EP 2002744862 020711; WO 2002US22040 020711
PRIORITY (CC, No, Date): US 304651 P 010711; US 192787 020710
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS (V7): A61F-007/00
LEGAL STATUS (Type, Pub Date, Kind, Text):

Application:	030319	A2 International application. (Art. 158(1))
Application:	030319	A2 International application entering European phase
Application:	040908	A2 International application. (Art. 158(1))
Appl Changed:	040908	A2 International application not entering European phase
Withdrawal:	040908	A2 Date application deemed withdrawn: 20040212

LANGUAGE (Publication,Procedural,Application): English; English; English

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Set     Items   Description
S1    1945040   PLATE? ?
S2    2789051   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3      25767   S2 (3N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL? OR OBLONG?)
S4     470656   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S5       8116   S4 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S6          2   S3 (10N) S5
S7         14   S3 AND S5
S8         14   IDPAT (sorted in duplicate/non-duplicate order)
S9         14   IDPAT (primary/non-duplicate records only)
S10       514   S2 (10N) S5
S11        46   S10 AND S1
S12         3   S11 AND IC=A61F
S13         3   S12 NOT S9
S14   1083245   PANEL? ? OR PLANE? ?
S15        30   S10 AND S14
S16         0   S15 AND IC=A61F
S17        29   S15 NOT (S9 OR S13)
S18        29   IDPAT (sorted in duplicate/non-duplicate order)
S19        29   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Dec 1976-2005/Dec(Updated 060404)
         (c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD=200645
         (c) 2006 The Thomson Corp.
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9/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

014093569 **Image available**
WPI Acc No: 2001-577783/200165
XRPX Acc No: N01-429790
Technological gadget to fix mobile contacts of electromagnetic switching device
Patent Assignee: SEIFULOV R V (SEIF-I); URALELEKTRO K STOCK CO (URAL-R)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RU 2170979	C1	20010720	RU 2000129313	A	20001124	200165	B

Priority Applications (No Type Date): RU 2000129313 A 20001124
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RU 2170979	C1			H01H-049/00	

Abstract (Basic): RU 2170979 C1
NOVELTY - Technological gadget to fix mobile contacts of electromagnetic switching device while welding arcing horns to them includes steel clamp with oval elongated slits inclined to opposite sides formed in each clamp wall and round hole in jumper to anchor **helical** handle with trapezoidal **thread** on end that passes through round hole in jumper of clamp into its space, steel frame whose cylindrical lower part has internal trapezoidal thread into which trapezoidal thread of end of handle is screwed. Lower part is made as one unit with upper hollow rectangular part having two open opposite vertical walls and two other opposite vertical walls with **oval** elongated through **holes** arranged horizontally. L-shaped steel sliders with through holes in flanges and copper jaws with side protrusions and supporting platform between them attached to outer surface of vertical wall of each slider are brought into space of upper part and under base of mobile contact and to plates forming arcing ho rns welded to it. Handles are brought through **oval holes** in walls of **rectangular** upper part into matched holes in both sliders.
USE - Electrical engineering, manufacture of low-voltage equipment, contactors and starters.
ADVANTAGE - Provision for reliable attachment and precision of relative positions of connected members of mobile contacts, facilitated removal of connected members after welding due to exclusion of their tacking to gadget in process of welding with simultaneous high productivity and convenient usage. 21 dwg
pp; 0 DwgNo 1/1
Title Terms: TECHNOLOGY; GADGET; FIX; MOBILE; CONTACT; ELECTROMAGNET; SWITCH; DEVICE
Derwent Class: V03
International Patent Class (Main): H01H-049/00
International Patent Class (Additional): H01H-001/34
File Segment: EPI

9/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013465777 **Image available**
WPI Acc No: 2000-637720/200061
XRPX Acc No: N00-472965

Cable connector adapter for electrical devices, has tubular flexible conduit with helical surface convolution that is screwed into oval **threaded screw** hole **of integrally formed female nut of cable connector boot**

Patent Assignee: GOETT E P (GOET-I); SMITH S (SMIT-I)
Inventor: GOETT E P; SMITH S

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6126477	A	20001003	US 9879503	A	19980326	200061 B
			US 99277325	A	19990326	

Priority Applications (No Type Date): US 9879503 P 19980326; US 99277325 A 19990326
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6126477	A		6	H01R-013/56	Provisional application US 9879503

Abstract (Basic): US 6126477 A

NOVELTY - A tubular elastically deformable flexible conduit with helical surface convolutions, is connected to the boot, by screwing into **oval** threaded screw **holes** of an **oval** female nut (38) integrally formed at conduit receiving end (28) of the boot while the conduit is deforming to engage with female nut **thread** (40) that is complementary to **helical** surface convolutions.

DETAILED DESCRIPTION - A connector boot has an open connector receiving end, and a conduit receiving end (28). The fastener contains an integrally formed tie wrap housing with a flange and a tie wrap for screwly wrapping around the wrap housing. A fastener at the conduit's other end connects the conduit to electric cable, and a connector connects the boot to cable connector and shield clip. The connector in the boot has one integrally formed flange in connector boot, which has a hole for aligning with screw hole of existing cable connector and shielding clip and a jack screw for retaining the flanges into cable connector and shielding clip.

USE - Used in electrical devices for terminating to conductors of shielded cable.

ADVANTAGE - By multiple termination within the flexible conduit segment of the adaptor, strain relief is ensured. Enables transaction of large round cables down to relatively narrow rectangular connector, while the adaptor serves to direct protect, organize and segregate the cables, are in a very small space. It is extremely lightweight for making is suitable for aviation applications, hence it is inexpensive and easy to manufacture.

DESCRIPTION OF DRAWING(S) - The figure shows the end elevation view and cross-sectional side elevation view of cable connector adaptor.

Receiving end (28)
Female nut (38)
Female nut thread (40)
pp; 6 DwgNo 3, 4/5

Title Terms: CABLE; CONNECT; ELECTRIC; DEVICE; TUBE; FLEXIBLE; CONDUIT; HELICAL; SURFACE; CONVOLUTE; SCREW; OVAL; THREAD; SCREW; HOLE; INTEGRAL; FORMING; FEMALE; NUT; CABLE; CONNECT; BOOT
Derwent Class: V04; W06
International Patent Class (Main): H01R-013/56
File Segment: EPI

9/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013448544 **Image available**
WPI Acc No: 2000-620487/200060
XRAM Acc No: C00-186002

Single rotor extruder for mixing and compounding rubber and plastics e.g. for tires, has extruder screw, especially having Transfermix section, and upstream or downstream gear pump, depending on the application, in an integral casing

Patent Assignee: A-Z FORMEN & MASCHBAU GMBH (AZFO-N); FRENKEL CD AG (FREN-N)
Inventor: MEYER P
Number of Countries: 092 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 2347643	A	20000913	GB 9916725	A	19990719	200060	B
WO 200053390	A1	20000914	WO 2000GB899	A	20000310	200060	
AU 200031767	A	20000928	AU 200031767	A	20000310	200067	
GB 2347643	B	20010530	GB 9916725	A	19990719	200131	
EP 1159120	A1	20011205	EP 2000909485	A	20000310	200203	
			WO 2000GB899	A	20000310		

Priority Applications (No Type Date): GB 998143 A 19990410; GB 995487 A 19990311
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2347643	A		29	B29C-047/38	
WO 200053390	A1	E		B29C-047/50	
Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
AU 200031767	A			B29C-047/50	Based on patent WO 200053390
GB 2347643	B			B29C-047/38	
EP 1159120	A1	E		B29C-047/50	Based on patent WO 200053390
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					

Abstract (Basic): GB 2347643 A

NOVELTY - Single rotor extruder for plastic or visco-elastic medium has an extruder screw and a gear pump with at least two gear wheels in an integral casing. One of the wheels is coaxial with and fixed to the extruder screw. The gear pump outlet may lead to the inlet of the extruder screw or vice versa. The screw has a Transfermix section formed by part of its external **helical thread** working in a barrel part of the casing having a coaxial internal **helical thread** of opposite hand.

DETAILED DESCRIPTION - Preferred Features: The Transfermix section is next to the gear pump. The cross-sectional areas of the grooves of its **helical threads** vary in opposite senses between maxima and minima along the length of the feed passage for the medium. The coaxial gear wheel and shaft of the extruder screw may be mounted so as to rotate together fixedly or so as to be independently rotatable. In the latter case, the other gear wheel of the pump has a separate drive providing the coaxial gear wheel with a different rotational speed. The coaxial gear wheel and screw shaft may alternatively be connected by a transmission that provides a step-wise or continuously variable ratio between their speeds. If the gear pump is upstream of the extruder screw, its outlet passage progressively increases in cross-section from zero to a maximum, enabling full flow of the medium, then continues as

a feed passage in the extruder casing open towards the screw over an initial feed length with a cross-section continuously decreasing to zero. The passage spirals in the opposite direction to that of the screw. The upstream gear pump has a feed inlet for feeding sheet, strip, or pellets of medium into a single intake nip between one gear wheel and the casing wall. The gear wheel defining the nip has a larger diameter than the other gear wheel.

The single rotor extruder is especially a dump extruder-mixer in which the extruder has a **rectangular** drop **opening** and the feed side of the gear pump forms an inlet. The outlet from the internal mixer and the extruder inlet are connected by a drop chute. The length of the gear wheels accommodate the depth of the chute and pump means, gland means, and a vacuum pump are provided to enable the drop chute to operate under vacuum. The gear wheels have small moduli to enhance their cooling capacity.

When the gear pump is downstream of the extruder, the single rotor extruder may be used as a cold feed Transfermix extruder.

USE - For mixing, compounding, and shaping elastomers and plastics, particular rubber compounds for use in the tire industry.

ADVANTAGE - The extruder can be made considerably smaller than those previously used and the drop chute, if employed, can be cooled and isolated from the atmosphere. When used as a cold feed extruder, higher throughput rates can be achieved at lower screw rotation speeds to reduce the temperature of the medium.

DESCRIPTION OF DRAWING(S) - The figures show a longitudinal section through an extruder having an upstream gear pump and a cross-section through the gear pump.

Extruder screw (1)
Casing (2)
Gearbox (3)
Gear pump inlet (4)
Gear wheels (5,6)
Gear pump outlet (10)
Transfermix section (12)
Casing coolant passages (13)
Gear wheel coolant passages (14)
pp; 29 DwgNo 1, 2/11

Title Terms: SINGLE; ROTOR; EXTRUDE; MIX; COMPOUND; RUBBER; PLASTICS; EXTRUDE; SCREW; SECTION; UPSTREAM; DOWNSTREAM; GEAR; PUMP; DEPEND; APPLY; INTEGRAL; CASING
Derwent Class: A32
International Patent Class (Main): B29C-047/38; B29C-047/50
International Patent Class (Additional): B29C-047/10; B29C-047/58
File Segment: CPI

9/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012898517 **Image available**
WPI Acc No: 2000-070352/200006
XRAM Acc No: C00-019987
Extruder for processing thermoplastic materials
Patent Assignee: VORON TECHN ACAD (VOTE-R)
Inventor: ABRAMOV O V; OSTRIKOV A N
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
RU 2118257	C1	19980827	RU 97117284	A	19971023	200006	B

Priority Applications (No Type Date): RU 97117284 A 19971023
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
RU 2118257	C1			B29C-047/38	

Abstract (Basic): RU 2118257 C1

NOVELTY - Extruder has case, hopper, screw, and shaping head with drawing die. Shape and configuration of inner surface of case vary to form six regions arranged in tandem and gradually turning one into other over helical line. Shape of inner surface of case varies in each region depending on its function. In charging region, case has constant inner nominal diameter. In mixing region, inner surface of case has **rectangular slot** made along helical line, its depth and pitch being constant throughout entire length of region. In compression region, case inner diameter varies and diametric clearance between screw and case reduces from region origin to its end. In homogenizing region, permanent-pitch and permanent-depth slot is made on inner surface of case to form oval **helical** duct opposing direction of screw **thread** . In gradual pressure rise region, clearance between outer diameter of screw and inner diameter of case reduces in direction of material flow. In pressure stabilization region, inner surface of nominal-diameter case is provided with slot forming varying-depth conical helical duct. Flow section of helical duct increases in direction of product flow in proportion to pressure rise.

USE - Processing thermoplastic materials requiring continuous mixing and homogenizing.

ADVANTAGE - Improved quality of finished product due to intensification of mixing and homogenizing processes as well as due to presetting rate of pressure rise. 4 dwgo

pp; 0 DwgNo 1/1
Title Terms: EXTRUDE; PROCESS; THERMOPLASTIC; MATERIAL
Derwent Class: A31
International Patent Class (Main): B29C-047/38
International Patent Class (Additional): B29C-047/66
File Segment: CPI

9/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012761564 **Image available**
WPI Acc No: 1999-567691/199948
XRPX Acc No: N99-419805
Electrically driven feed screw type actuator for raising or lowering loads
Patent Assignee: MITSUBA DENKI SEISAKUSHO KK (MTSD)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11247960	A	19990914	JP 9869511	A	19980304	199948	B

Priority Applications (No Type Date): JP 9869511 A 19980304
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11247960	A			F16H-025/20	

Abstract (Basic): JP 11247960 A
NOVELTY - A connection hole (29) is provided in a connection tool (24) array from an external-thread (27) for positioning formed on one end of the connection tool. A pair of **oblong holes** (26) is formed in a movement tube (22) array from an internal-thread (25) for positioning in which the external-thread for positioning is screwed in.
DETAILED DESCRIPTION - An actuator (1) provided with a shaft (15) is removably supported in a housing (2) and is rotated in forward and reverse directions with a motor (12). The shaft is slidably connected with the movement tube. An internal-thread (17) which moves the movement tube in the direction of an axial center is connected with an external-thread (16) formed on the periphery of the shaft and screwed together slidably. The internal-thread for positioning formed on the tip of the movement adjustably inserts the **helical** external- **thread** for positioning in the center direction position of the movement tube. The connection hole through which a connection pin (38) passes, is provided in the connection tool. The external-thread for positioning is formed on one end of the connection tool and the internal-thread for positioning is formed on single side of the **oblong hole** of the movement tube.
USE - For raising or lowering loads.
ADVANTAGE - Prevents burr formation in threads. Maintains accuracy of screw thread and prevents denting of screw threads.
DESCRIPTION OF DRAWING(S) - The figure shows a cross- sectional diagram of actuator.
Actuator (1)
Housing (2)
Motor (12)
Shaft (15)
External-threads (16,27)
Internal-threads (17,25)
Movement tube (22)
Connection tool (24)
Oblong hole (26)
Connection hole (29)
Connection pin (38

Title Terms: ELECTRIC; DRIVE; FEED; SCREW; TYPE; ACTUATE; RAISE; LOWER; LOAD
Derwent Class: Q64
International Patent Class (Main): F16H-025/20
International Patent Class (Additional): F16H-025/24
File Segment: EngPI

9/5/6 (Item 6 from file: 350)

010983009 **Image available**
WPI Acc No: 1996-479958/199648
XRPX Acc No: N96-404763

Airtight compact for make-up material - has storage part in container body that accommodates detachable cartridge rotatably

Patent Assignee: KAMAYA KAGAKU KOGYO KK (KAMK)
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8242936	A	19960924	JP 9580802	A	19950313	199648	B
JP 3739105	B2	20060125	JP 9580802	A	19950313	200608	

Priority Applications (No Type Date): JP 9580802 A 19950313
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8242936	A		6	A45D-033/00	
JP 3739105	B2		7	A45D-033/00	Previous Publ. patent JP 8242936

Abstract (Basic): JP 8242936 A

The compact consists of an oval shaped container body (1) and a hinged cover (2). A part of peripheral wall (1a) of the container body is notched. A storage part is provided in the container body with a number of stopper pieces (1h) projecting from its bottom wall (1c) to receive and secure a make-up material storage cartridge (4). The cover has a top plate (2b) from which a circular peripheral wall (2d) corresponding to the storage part projects downward.

A **spiral** female **thread** (2e) is provided in the circular peripheral wall. The cartridge is loaded in the storage part in a detachable and rotatable manner. The cartridge has a base plate (4c) with **rectangular holes** (4e) corresponding to the stopper pieces of the storage part. A toroidal wall (4a) of the cartridge has a male thread (4b) that locks with the female thread of the cover wall. An operating lever (4d) is provided in the cartridge.

ADVANTAGE - Provides easy cartridge loading and unloading facility. Is economical. Allows use of volatile material. Prevents damage to make-up material during loading. Eliminates need for separate complex airtight mechanism.

Dwg.3/7

Title Terms: AIRTIGHT; COMPACT; UP; MATERIAL; STORAGE; PART; CONTAINER; BODY; ACCOMMODATE; DETACH; CARTRIDGE; ROTATING
Derwent Class: P24
International Patent Class (Main): A45D-033/00
File Segment: EngPI

9/5/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010954859 **Image available**
WPI Acc No: 1996-451809/199645
XRPX Acc No: N96-380949

Mounting structure for ceiling embedded type air conditioner - has extension part extending on both sides of grill main body and covers opening in sealing panel which corresponds to outer edge of attachment part of air conditioner

Patent Assignee: FUJITSU GENERAL LTD (GENH)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8226700	A	19960903	JP 9530555	A	19950220	199645	B

Priority Applications (No Type Date): JP 9530555 A 19950220
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8226700	A		4	F24F-013/32	

Abstract (Basic): JP 8226700 A

The mounting structure has suspension rods fixed in the beam (1) of the ceiling, provided with **spiral threads** . An attachment part (3b) is provided to the air conditioner (3) on both sides of the main body having mounting holes corresponding to the suspension bolts. A number of nuts (6) are provided for fixing the attachment part to the suspended bolts. The front side of the air conditioner has an air duct (3a) covered with a grill main body (4).

A **rectangular opening** (4A) is provided on all four sides of the grill in opening of the sealing panel (2), which extends on both sides upto the outer edge of the attachment part. Extension side piece (4b) of grill having bellows or a flat board is provided on both sides of the grill and fixed to it by means of nail clamped to connection part (4c) of the grill.

ADVANTAGE - Improves washing efficiency as height of main body of air conditioner is adjusted in level with opening of sealing by increasing or decreasing gap between attachment part sealing panel.

Dwg.1/5

Title Terms: MOUNT; STRUCTURE; CEILING; EMBED; TYPE; AIR; CONDITION; EXTEND ; PART; EXTEND; SIDE; GRILL; MAIN; BODY; COVER; OPEN; SEAL; PANEL; CORRESPOND; OUTER; EDGE; ATTACH; PART; AIR; CONDITION
Derwent Class: Q68; Q74
International Patent Class (Main): F24F-013/32
International Patent Class (Additional): F16M-013/02
File Segment: EngPI

9/5/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010810747 **Image available**
WPI Acc No: 1996-307700/199631
XRPX Acc No: N96-258559

Level adjustment device for collapsible house - has height adjustment bolt which is inserted through second thread hole of level adjustment metal fitting and presses upper surface part from top side

Patent Assignee: YODOGAWA SEIKOSHO KK (YODO-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 8135292	A	19960528	JP 94295817	A	19941105	199631	B

Priority Applications (No Type Date): JP 94295817 A 19941105
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 8135292	A		6	E05D-015/06	

Abstract (Basic): JP 8135292 A

The device includes a main support body which has an outer surface part (42) which is bent at an upper edge in a rectangular shape to form an upper surface part. A secondary rectangular bend is made at a predetermined position of the upper surface part to form a side part (44). A square **opening** and an elongated **rectangular opening** are formed on the upper surface part. A length hole (44a) is formed in the side part. A guide rail (7) has a horizontal upper surface part which is bent at both sides to form an outer part and an inner part both the lower termination of outer and inner parts are bent to form a pair of rails (75) which face each other. A first bolt hole and an opening are provided in the horizontal upper surface part of the guide rail.

A level adjusting metal fitting (8) has an upper surface part (82) and a horizontal surface part (81). A suspending part (83) is formed by bending the upper surface part at one side. The first thread hole, second thread hole and third thread hole are formed individually on the horizontal surface part, the upper surface part and the suspending part. The guide rail is set inside the main support body which is attached to the frame. The horizontal surface part and the suspending part pierces through the square **opening** and the elongated **rectangular opening** . A first tie bolt (9) is inserted **spirally** into the third **thread** hole through the length hole externally. A second tie bolt (10) is inserted **spirally** into the first **thread** hole through the first bolt hole internally. A height adjustment bolt (11) is installed **spirally** in the second **thread** hole and presses the upper surface part of the main support body from top side.

ADVANTAGE - Facilitates height adjustment work. Saves labour and improves accuracy.

Dwg.1/6

Title Terms: LEVEL; ADJUST; DEVICE; COLLAPSE; HOUSE; HEIGHT; ADJUST; BOLT; INSERT; THROUGH; SECOND; THREAD; HOLE; LEVEL; ADJUST; METAL; FIT; PRESS; UPPER; SURFACE; PART; TOP; SIDE
Derwent Class: Q43; Q46; Q47
International Patent Class (Main): E05D-015/06
International Patent Class (Additional): E04B-001/343; E04H-001/12
File Segment: EngPI

9/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

010390593 **Image available**
WPI Acc No: 1995-291907/199538
Screw and grommet assembly for securing two mating panels together - uses two sets of lugs for threading engagement with screw threads
Patent Assignee: ILLINOIS TOOL WORKS INC (ILLT)
Inventor: GUGLE J E; MARION J E; SCHULTZ D M
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5429467	A	19950704	US 94260725	A	19940615	199538	B
DE 19521744	A1	19951221	DE 1021744	A	19950614	199605	
DE 19521744	C2	19981126	DE 1021744	A	19950614	199851	

Priority Applications (No Type Date): US 94260725 A 19940615
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5429467	A		6	F16B-037/04	
DE 19521744	A1		8	F16B-005/02	
DE 19521744	C2			F16B-005/02	

Abstract (Basic): US 5429467 A
The assembly comprises a screw having desired major and minor **helical threads** , and an oblong grommet having a head portion, a body portion and a central **oblong opening** extending through the head portion and the body portion. The head portion includes a front surface and a back surface. The body portion is substantially rectangular in cross-sectional configuration defined by a first pair of opposing major sides and a second pair of opposing minor sides. A first proximal end is connected to the back surface of the head portion and a second distal end extends away from the head portion a predetermined distance.
There are two sets of lugs, one set each positioned on the opposing major sides of the body portion for threading engagement with the screw threads. Each set includes a predetermined number of lugs, being staggered with respect to each other and being positioned a predetermined distance away from the proximal end of the body portion. The predetermined distance is selected to enable outwardly flexing of the body portion proximate the lugs.
ADVANTAGE - Can withstand higher torques from screws without damage to the grommet.
Dwg.1/4
Title Terms: SCREW; GROMMET; ASSEMBLE; SECURE; TWO; MATE; PANEL; TWO; SET; LUG; THREAD; ENGAGE; SCREW; THREAD
Derwent Class: Q61
International Patent Class (Main): F16B-005/02; F16B-037/04
International Patent Class (Additional): F16B-033/02; F16B-037/16
File Segment: EngPI

9/5/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004634006
WPI Acc No: 1986-137349/198622
XRPX Acc No: N86-101665
Combination carton opener-pourer - has sharp-tipped spiral held rigid in carton and being provided with fluid discharge spike
Patent Assignee: LLEWELLYN G T (LLEW-I)
Inventor: LLEWELLYN G T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
AU 8542525	A	19860410	AU 8542525	A	19850515	198622	B

Priority Applications (No Type Date): AU 847280 A 19840924; AU 8542525 A 19850515
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 8542525	A		7		

Abstract (Basic): AU 8542525 A

A hollow spiral shaped member has a sharp point and an **oblong hole** between the point and a flange, to allow fluid flow through the centre of a spike to the outside of the carton. The opener-pourer has a **spiral thread** to hold the member rigid in the carton. The **spiral thread** is combined with the flange to seal the member against leakage.

The opener-pourer has four raised sections evenly spaced on the external part of the member to increase gripping power. A hinged lid seals contents against moisture and foreign odours.

ADVANTAGE - The carton opener-pourer may be removed easily from the carton and used again. (7pp Dwg.No.2/2
Title Terms: COMBINATION; CARTON; OPEN; POUR; SHARP; TIP; SPIRAL; HELD; RIGID; CARTON; FLUID; DISCHARGE; SPIKE
Derwent Class: Q32; Q39
International Patent Class (Additional): B65D-025/48; B67B-007/86
File Segment: EngPI

9/5/12 (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004062525
WPI Acc No: 1984-208066/198434
XRPX Acc No: N84-155556
Drying device for hay and straw bales - comprises rigid rod-shaped insert to form or define boundary of elongate hollow space in bale
Patent Assignee: GRAMSE S (GRAM-I)
Inventor: GRAMSE S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 3305134	A	19840816	DE 3305134	A	19830215	198434	B

Priority Applications (No Type Date): DE 3305134 A 19830215
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3305134	A		9		

Abstract (Basic): DE 3305134 A
The plastics or steel inserts (3) may be tubular with a number of **rectangular slots** (4) or perforations. During bale forming the tubes are inserted into the hay bale and finally the hay is pressed around the tubes. Two tube parts may be releasably plug-connected to each other.
To facilitate easy withdrawal after a drying out period, the tubes may have a chamfered edge and a withdrawal handle at one end. A **helical** coarse **thread** may be applied to the tube surface to additionally facilitate withdrawal. The tube diameter is pref. 5-20 cm.
2/6
Title Terms: DRY; DEVICE; HAY; STRAW; BALE; COMPRISE; RIGID; ROD; SHAPE; INSERT; FORM; DEFINE; BOUNDARY; ELONGATE; HOLLOW; SPACE; BALE
Derwent Class: P12
International Patent Class (Additional): A01F-015/08; A01F-025/08
File Segment: EngPI

9/5/13 (Item 13 from file: 350)
DIALOG(R)File 350:Derwent WPIX

001301335
WPI Acc No: 1975-J5252W/197534
Rotational speed control mechanism - spigoted wheel moves between coaxial tracks controlled by track points
Patent Assignee: LE SCAO J-M (LSCA-I)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2250410	A	19750704				197534 B

Priority Applications (No Type Date): FR 7339203 A 19731105

Abstract (Basic): FR 2250410 A
Shaft (1) is connected to a disc (2) which has two concentric rings of equally spaced **oval openings** (3,4) and just outside each, a circular track groove (8, 9). These **track** grooves are connected by **spiral track** grooves (12, 15) and movable portions (11, 14) rather like railway track points. Some of the **oval openings** are progressively radially extended (3b, 4b) and additional openings (13, 16) are interposed between the longest pairs. The shaft (7), carries a sliding wheel (6) which has a flange (10) which runs in the track grooves of disc (2). Wheel (6) also carries spigots (5) which mesh in the **oval openings** . Speed ratio may be changed or reversed by operating points (11) using cam (17) and followers (19), (20).
Title Terms: ROTATING; SPEED; CONTROL; MECHANISM; SPIGOT; WHEEL; MOVE; COAXIAL; TRACK; CONTROL; TRACK; POINT
Derwent Class: Q64
International Patent Class (Additional): F16H-005/04; F16H-037/02
File Segment: EngPI

9/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX

001247631
WPI Acc No: 1975-D1424W/197512
Through bolt for wall shuttering - has helical thread **and nuts at ends have** oval openings
Patent Assignee: OUTINBAT (OUTI-N)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
FR 2232217	A	19750131				197512	B

Priority Applications (No Type Date): FR 7319418 A 19730529

Abstract (Basic): FR 2232217 A
The fixing for wall shuttering panels comprises a through tie-bolt (1) on which are helicoidal ribs, which mesh with similar thread in an anchoring nut (13). Between this nut and the shutter face is a spacing nut (23) which holds the shutter panel and allows fine adjustment of position. Each element is double threaded, ie the ribs and grooves are in two groups. The opening in the anchor nut (13) and spacer nut is oval to simplify location and fixing. The two shutter faces and liners are held apart by means of a tubular spacing sleeve inserted around the bolt (1). A double-handled nut is then threaded onto the free end and tightened up thus compressing the two shutter faces against the spacing sleeve. The shutters are therefore rigidly fixed at a specified distance apart.
Title Terms: THROUGH; BOLT; WALL; SHUTTERING; HELICAL; THREAD; NUT; END; OVAL; OPEN
Derwent Class: Q46
International Patent Class (Additional): E04G-017/00
File Segment: EngPI

13/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016531343 **Image available**
WPI Acc No: 2004-689909/200467
Related WPI Acc No: 2002-105310; 2002-303583; 2002-452931; 2003-018100; 2003-018101; 2003-219442; 2003-440580; 2003-440581; 2004-553077; 2004-668101; 2004-689907; 2004-689908; 2005-038794; 2005-038795; 2005-038796; 2005-038797; 2005-232367; 2005-232369; 2005-232370; 2005-232371; 2005-232372; 2005-497291; 2005-563579; 2005-713292; 2005-725167; 2006-038289; 2006-056433; 2006-164301
XRPX Acc No: N04-546634

Stabilizing method for bone fracture, involves removing K-wire after permanently fixing plate **over fracture with multiple pegs formed with threads along one or more portions**

Patent Assignee: HAND INNOVATIONS INC (HAND-N); HAND INNOVATIONS LLC (HAND-N)
Inventor: ORBAY J L
Number of Countries: 108 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20040193165	A1	20040930	US 2003401089	A	20030327	200467	B
			US 2003664371	A	20030917		
			US 2003689797	A	20031021		
WO 200534780	A1	20050421	WO 2004US8752	A	20040322	200527	

Priority Applications (No Type Date): US 2003689797 A 20031021; US 2003401089 A 20030327; US 2003664371 A 20030917
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040193165	A1		14	A61B-017/58	CIP of application US 2003401089 CIP of application US 2003664371
WO 200534780	A1	E		A61B-017/56	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Abstract (Basic): US 20040193165 A1

NOVELTY - A T-shaped **plate** (102) is placed over a reduced fracture. The reduced fracture is temporarily stabilized, by fixing **plate** over the fracture with K-wires. The K-wire is removed after permanently fixing the **plate** over fracture with multiple pegs (106,108) formed with threads along one or more portions.

USE - For stabilizing bone fracture.

ADVANTAGE - Enables aligning and stabilizing multiple bone fragments in fracture to permit proper healing. Enables entry and retention of bone pegs within the peg holes due to bone pegs and peg holes within the **plate** . Reduces cross threading by fifty percent due to combination of double lead **thread holes** and a single **helical thread** on the peg head. Enables stabilizing and securing head of **plate** on the bone even when pegs do not have threaded shafts. Prevents damage to bone caused by drilling process since K-wire is of relatively small diameter.

DESCRIPTION OF DRAWING(S) - The figure shows the radial side elevation view of a right hand volar **plate** coupled with pegs.

Plate (102)
Pegs (106,108)
Body portion (116)

Body alignment hole (150)
pp; 14 DwgNo 1/14
Title Terms: STABILISED; METHOD; BONE; FRACTURE; REMOVE; WIRE; AFTER; PERMANENT; FIX; **PLATE** ; FRACTURE; MULTIPLE; PEG; FORMING; THREAD; ONE; MORE; PORTION
Derwent Class: P31; P32
International Patent Class (Main): A61B-017/56; A61B-017/58
International Patent Class (Additional): **A61F-002/30**
File Segment: EngPI

13/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

009550898 **Image available**
WPI Acc No: 1993-244445/199331
XRPX Acc No: N93-187960

Holding support for vertebra - is of tubular form with an external screw thread and is made of titanium

Patent Assignee: ASAHI KOGAKU KOGYO KK (ASAO); PENTAX CORP (ASAO)
Inventor: MATSUZAKI H; OJIMA S; NAKAMURA M
Number of Countries: 002 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 4302397	A1	19930729	DE 4302397	A	19930128	199331	B
US 5534031	A	19960709	US 939916	A	19930127	199633	
			US 94306430	A	19940919		
US 5776196	A	19980707	US 939916	A	19930127	199834	
			US 94306430	A	19940919		
			US 96610835	A	19960305		
DE 4302397	C2	20030821	DE 4302397	A	19930128	200357	

Priority Applications (No Type Date): JP 9238566 A 19920128
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4302397	A1		9	A61F-002/44	
US 5534031	A		15	A61F-002/44	Cont of application US 939916
US 5776196	A			A61F-002/44	Cont of application US 939916 Div ex application US 94306430 Div ex patent US 5534031
DE 4302397	C2			A61F-002/44	

Abstract (Basic): DE 4302397 A

An artificial spacer is used to hold two adjacent vertebrae at the correct distance from each other after the cartilage disc, which normally holds the vertebrae in position, has been removed. The spacer (501) is of tubular form and is screwed into the two vertebrae (311) to hold them at the required distance from each other.

The spacer is made from a material of the necessary strength and stiffness such as titanium. The spacer has radial holes in its wall and these holes extend from the inner surface to the outer surface.

ADVANTAGE - The element holds the vertebrae in a stable position and can resist both tensile and compressive forces.

Dwg.1/17

Title Terms: HOLD; SUPPORT; VERTEBRA; TUBE; FORM; EXTERNAL; SCREW; THREAD; MADE; TITANIUM
Derwent Class: P31; P32; P34
International Patent Class (Main): **A61F-002/44**
International Patent Class (Additional): A61B-017/56; A61L-027/00
File Segment: EngPI

13/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

008270713 **Image available**
WPI Acc No: 1990-157714/199021
Related WPI Acc No: 1991-163909; 1991-163913
XRPX Acc No: N90-122580
Fusion cage for bone joints - has external, continuous helical **v-**thread **which can be screwed into** bore **after forming in** bore **mating female threads that bite**
Patent Assignee: SURGICAL DYNAMICS INC (SURG-N); CEDAR SURGICAL INC (CEDA-N); SURGICAL DYNAMICS (SURG-N)
Inventor: DICKHUDT E A; RAY C D
Number of Countries: 007 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 369603	A	19900523	EP 89310572	A	19891016	199021	B
US 4961740	A	19901009	US 88259031	A	19881017	199043	
US 5026373	A	19910625	US 89432088	A	19891106	199128	
CA 1306913	C	19920901	CA 614055	A	19890928	199241	
US 4961740	B1	19970114	US 88259031	A	19881017	199710	
EP 369603	B1	19980520	EP 89310572	A	19891016	199824	
DE 68928675	E	19980625	DE 628675	A	19891016	199831	
			EP 89310572	A	19891016		

Priority Applications (No Type Date): US 88259031 A 19881017; US 89432088 A 19891106
Cited Patents: DE 3505567; EP 268115; US 4501269; WO 8707827
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 369603	A		9		
Designated States (Regional): DE FR GB NL SE					
US 4961740	A		9		
US 5026373	A		11		
US 4961740	B1		19	A63F-002/44	
EP 369603	B1	E	10	A61F-002/44	
Designated States (Regional): DE FR GB NL SE					
DE 68928675	E			A61F-002/44	Based on patent EP 369603
CA 1306913	C			A61F-002/44	

Abstract (Basic): EP 369603 A
The fusion cage has a hollow perforate rigid cylinder and this can be surgically inserted into a bore formed in two adjacent long structures. This bore has been packed with bone chips and thus invites ingrowth of live bone. On the cage is an external continuous helical V-thread which allows it to screw into the female threads formed on the bore.
It is also perforated in the valley between adjacent turns of the thread. The angle at the crown of the V-thread is between 45 and 90 deg.
ADVANTAGE - Achieves pain reduction and maintains invertebral height. (9pp Dwg.No.1/4)
Title Terms: FUSE; CAGE; BONE; JOINT; EXTERNAL; CONTINUOUS; HELICAL; THREAD ; CAN; SCREW; BORE; AFTER; FORMING; BORE; MATE; FEMALE; THREAD; BITE
Derwent Class: P32; P36
International Patent Class (Main): **A61F-002/44** ; A63F-002/44
International Patent Class (Additional): **A61F-001/03** ; **A61F-005/04** ; A63F-002/28
File Segment: EngPI

19/5/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015291189 **Image available**
WPI Acc No: 2003-352122/200333
XRAM Acc No: C03-092679
XRPX Acc No: N03-281209

Upper cover plate for air-tight chamber comprises thread holes, at least one of which is formed as a through thread hole connecting to bottom surface of upper cover plate

Patent Assignee: MOSEL VITELIC INC (MOSE-N)
Inventor: CHENG A; LEE T; LEE W; LIU P

Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 6491178	B1	20021210	US 2000711926	A	20001115	200333	B

Priority Applications (No Type Date): TW 2000U214391 U 20000818
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6491178	B1		8	B65D-043/26	

Abstract (Basic): US 6491178 B1

NOVELTY - An upper cover plate for an air-tight chamber comprises thread holes, at least one of the thread holes being formed as a through thread hole connecting to the bottom surface of the upper cover plate. The respective tool for engaging with the through thread hole includes a portion for penetrating the through thread hole and going beyond the bottom surface.

DETAILED DESCRIPTION - An upper cover plate (2) for an air-tight chamber, for engaging a chamber body (1) to form the air-tight chamber. The chamber body includes a top surface (13) for matching with a bottom surface (22) of the upper cover plate and comprises thread holes engageable respectively with tools (3). At least one of the thread holes is formed as a through thread hole (23) connecting to the bottom surface and the respective tool for engaging with the through thread hole includes a portion for penetrating the through thread hole and going beyond the bottom surface. The tool for engaging with the through thread hole comprises:

(1) a hand bar (31) for receiving a torque to drive the tool **helically** along the through **thread hole** ;

(2) stem bar (32) formed as a rotation axis for the hand bar, with a first end connecting fixedly with the hand bar; and

(3) a thread part (33) fixedly connected with a second end of the stem bar, engageable with the through thread hole.

While the tool is applied to the through thread hole, the torque is applied to the hand bar to rotate the thread part feeding along the through thread hole until a portion of the thread part goes beyond the bottom surface of the upper cover plate. The thread part further includes an extended portion for going beyond the bottom surface of the upper cover plate. The extended portion further includes a friction sleeve wrapping around the exterior of the extended portion.

An INDEPENDENT CLAIM is also included for a tool for removing an upper cover plate from a chamber body of an air-tight chamber comprising a hand bar, stem bar, thread part and an extended part connecting with the thread part which has an outer diameter smaller than an outer diameter of the thread part.

USE - For an air-tight chamber.

ADVANTAGE - The top surface of the chamber body can be utilized as a pivotal **plane** for the tool to easily perform a helical lifting application upon the upper cover plate through the engaged threads, so that the air-tight state of the chamber can be easily removed.

DESCRIPTION OF DRAWING(S) - The figure is a schematic view for showing the tools to remove the upper cover plate from the chamber body.

Chamber body (1)
Upper cover plate (2)
Tool (3)
Top surface (13)
Bottom surface (22)
Through thread hole (23)
Hand bar (31)
Stem bar (32)
Thread part (33)
pp; 8 DwgNo 3/4

Title Terms: UPPER; COVER; PLATE; AIR; TIGHT; CHAMBER; COMPRISE; THREAD; HOLE; ONE; FORMING; THROUGH; THREAD; HOLE; CONNECT; BOTTOM; SURFACE; UPPER; COVER; PLATE
Derwent Class: A92; Q33
International Patent Class (Main): B65D-043/26
File Segment: CPI; EngPI

19/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011870140 **Image available**
WPI Acc No: 1998-287050/199825
XRPX Acc No: N98-225535

Fastener nut, with threaded bore, formed from laminations - has identically shaped laminates, with bore which forms less than a full thread form and an outer periphery shaped for a spanner, stacked and aligned before being joined to form a full thread in the bore

Patent Assignee: SENCO PROD INC (SENC-N)
Inventor: MCGUFFEY A L; REMEROWSKI D L

Number of Countries: 065 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9820262	A1	19980514	WO 97US20225	A	19971103	199825	B
US 5785477	A	19980728	US 96745039	A	19961107	199837	
AU 9851703	A	19980529	AU 9851703	A	19971103	199841	
EP 935717	A1	19990818	EP 97946552	A	19971103	199937	
			WO 97US20225	A	19971103		
TW 358146	A	19990511	TW 97116642	A	19971107	199938	

Priority Applications (No Type Date): US 96745039 A 19961107
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9820262	A1	E	15	F16B-037/02	
Designated States (National): AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW MX NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN					
Designated States (Regional): AT BE CH DE DK ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 9851703	A			F16B-037/02	Based on patent WO 9820262
EP 935717	A1	E		F16B-037/02	Based on patent WO 9820262
Designated States (Regional): DE FR GB IT					
US 5785477	A			F16B-037/08	
TW 358146	A			F16B-037/00	

Abstract (Basic): WO 9820262 A

The nut (10) comprises a number of joined laminates or substrates, each laminate having an internal **bore** with less than a full **thread** form at the **helix** **plane** (13) an outer periphery (11) with faces, i.e. hexagonal or similar flats, for a wrench or spanner type tool.

Each laminate, identically shaped, is generally annular and the internal **bore** of each lamina contributes one-half of the **thread** form at the **helix** **plane** . Orientation **holes** (12a,12b) can be used to facilitate assembly of the laminate stack prior to permanent joining. Placing alternate laminates at (180) degree aligned relationship produces a full single thread when assembled.

USE - Threaded nut fastener.

ADVANTAGE - inexpensive to manufacture from a variety of materials using multi-staged, die-operated presses, suitable for resilient materials, simple and effective to use.

Dwg.1/4

Title Terms: FASTEN; NUT; THREAD; BORE; FORMING; LAMINATE; IDENTICAL; SHAPE ; LAMINATE; BORE; FORM; LESS; FULL; THREAD; FORM; OUTER; PERIPHERAL; SHAPE; SPANNER; STACK; ALIGN; JOIN; FORM; FULL; THREAD; BORE
Derwent Class: Q61
International Patent Class (Main): F16B-037/00; F16B-037/02; F16B-037/08
International Patent Class (Additional): F16B-021/18; F16B-033/02; F16B-039/14
File Segment: EngPI

19/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011246362 **Image available**
WPI Acc No: 1997-224265/199720
XRPX Acc No: N97-185697
Electrical distribution panel **for e.g. house - has switch attached by screw thread to screw thread hole through screw thread through hole and screw thread piercing hole**
Patent Assignee: MATSUSHITA ELECTRIC WORKS LTD (MATW)
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9070111	A	19970311	JP 95221751	A	19950830	199720	B
JP 3160500	B2	20010425	JP 95221751	A	19950830	200126	

Priority Applications (No Type Date): JP 95221751 A 19950830
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9070111	A		6	H02B-001/42	
JP 3160500	B2		6	H02B-001/42	Previous Publ. patent JP 9070111

Abstract (Basic): JP 9070111 A

The **panel** has two support plates (22) attached to a **panel** body (1) through a screw thread hole (53). An attachment plate (50) with a screw thread through hole (56) adjusted in the screw thread hole, is positioned within the periphery of the support plates.

A switch (3) with a screw thread piercing hole (64) adjusted in the screw thread through **hole** , is positioned at the attachment plate. The switch is attached **helically** by a screw **thread** (23) through those **holes** .

ADVANTAGE - Simplifies attachment work since switch can be attached **helically** by screw **thread** through screw **thread** **hole** , screw thread through **hole** and screw thread piercing **hole** . Performs prompt attachment work since screw thread through hole can be easily adjusted in screw thread hole. Improves assembly operation characteristic by connecting side of support plate to step when combining attachment and support plates. Promptly performs switch attachment work since it does not require conclusive position coefficient stage.

Dwg.1/8

Title Terms: ELECTRIC; DISTRIBUTE; **PANEL** ; HOUSE; SWITCH; ATTACH; SCREW; THREAD; SCREW; THREAD; HOLE; THROUGH; SCREW; THREAD; THROUGH; HOLE; SCREW ; THREAD; PIERCE; HOLE
Derwent Class: X13
International Patent Class (Main): H02B-001/42
International Patent Class (Additional): H01H-073/06
File Segment: EPI

19/5/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

011210166 **Image available**
WPI Acc No: 1997-188091/199717
XRPX Acc No: N97-155406
Storage box for electrical appts installed in wall - has side plate and curved side plate, connected with each rails and supports surface panel **using prop**
Patent Assignee: KAWAMURA DENKI SANGYO KK (KAWA-N)
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 9048488	A	19970218	JP 95219704	A	19950804	199717	B
JP 3367071	B2	20030114	JP 95219704	A	19950804	200308	

Priority Applications (No Type Date): JP 95219704 A 19950804
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9048488	A		3	B65D-085/68	
JP 3367071	B2		3	B65D-085/68	Previous Publ. patent JP 9048488

Abstract (Basic): JP 9048488 A
The storage box (1) is nearly equal in size between the floor surface and the sealing surface. A pair of rail (2) with some spiral holes (2a), mutually arranged in parallel.
A side plate (3) is connected with each rail. A curved side plate (4) is in turn connected with the side plate and supports a surface **panel** (5). A prop (6) is fixed to some **spiral holes** of rail in **thread** .
ADVANTAGE - Reduces number of parts and thus reduces mfg cost. Saves wiring and assembly.
Dwg.1/4
Title Terms: STORAGE; BOX; ELECTRIC; APPARATUS; INSTALLATION; WALL; SIDE; PLATE; CURVE; SIDE; PLATE; CONNECT; RAIL; SUPPORT; SURFACE; **PANEL** ; PROP
Derwent Class: Q34; V04
International Patent Class (Main): B65D-085/68
File Segment: EPI; EngPI

19/5/16 (Item 16 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004510024
WPI Acc No: 1986-013368/198602
XRAM Acc No: C86-005621
XRPX Acc No: N86-010028
Positive displacement wave pump coupled to extruder screw - uses slidable sealing discs to create pumping pockets
Patent Assignee: BARR R A (BARR-I)
Inventor: BARR R A
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4558954	A	19851217	US 84680971	A	19841212	198602	B
CA 1223417	A	19870630				198730	

Priority Applications (No Type Date): US 84680971 A 19841212; US 85690319 A 19850110
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4558954	A		11		

Abstract (Basic): US 4558954 A
Extruder for elasticating or melting solid plastic utilises screw (1) rotating in the upstream portion of the bore of a barrel (2) about a fixed axis forming the centre of the **bore** , the screw having at least one **helical** **thread** forming a **helical** channel for feeding the plastic. A positive displacement wave pump (15) is located in the bore between the discharge end of the screw and an outlet (32). Its rotor (19) which has a helically contoured outer surface defining a helical thread formation of wide rounded form, is coupled to the end of the screw so that its contoured surface orbits about the extended centre axis of the screw. The pump has a stator frame (20,22) with a cylindrical outer surface engaging and conforming to the surface of the cylindrical bore along which a slide disc stack (24) of slidable sealing discs extend in face to face contact with each other.
The stator is prevented from rotating whereas the discs are capable of reciprocative sliding movement parallel to a first diametric **plane** of the cylindrical bore as the rotor rotates thus forming a series of pumping pockets (35A,35B) which progress longitudinally from the inlet to outlet end of the wave pump. The discs have shaped centre apertures receiving the rotor which accommodate the full range of movement of the crests of its thread, these centre apertures forming another series of pumping pockets for the plastic.
USE/ADVANTAGE - Use of positive displacement pump in conjunction with screw extruder enables the extruder to perform at much higher revolution rates because the pump is able to pump against very severe flow restrictions at the extruder outlet although receiving plastic at low pressure at its inlet
Title Terms: POSITIVE; DISPLACEMENT; WAVE; PUMP; COUPLE; EXTRUDE; SCREW; SLIDE; SEAL; DISC; PUMP; POCKET
Derwent Class: A32; Q51
International Patent Class (Additional): B29B-001/06; B29C-047/60; F01C-019/02
File Segment: CPI; EngPI

19/5/17 (Item 17 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004168803
WPI Acc No: 1984-314342/198451
XRPX Acc No: N84-234475
Cladding fixture for support structure - has snap-on base component with separate flexible-helix fixing plate
Patent Assignee: REGIE NAT USINES RENAULT (RENA); TRW UNITED-CARR GMB (THOP)
Inventor: KLEIN J L; LEBLANC J
Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
FR 2545552	A	19841109	FR 837523	A	19830505	198451	B
DE 3416571	A	19850124	DE 3416571	A	19840504	198505	
DE 3416571	C	19880519				198820	

Priority Applications (No Type Date): FR 837523 A 19830505
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2545552	A		12		

Abstract (Basic): FR 2545552 A

The base component (2) has two spring fingers (6) which enable it to be fixed to the support. The conical upper flange (7) of the base component has four equi-spaced wedges (9). A spherical knuckle (8) is located above the conical flange.

The separate fixing plate (3) has a lower conical flange (10) with a series of teeth (11) around the underside. The upper portion of the fixing plate comprises a hollow cylindrical section around which a flexible helix (15) is wound. The knuckle is force fitted into the bore of the fixing plate. When axial pressure is applied, the wedges and teeth are engaged and rotating the fixing, **threads** the **helix** into the **hole** in the cladding.

ADVANTAGE - The fixing lends itself to automatic and rapid means of assembly.

6/6

DE 3416571 A

The anchor element has a tapered shaft (2) that can be inserted into a location hole on a mounting plate. The outside end of the shaft is provided with a tapered flange (7) and a central, spherical coupling ball (8).

A second coupling element (3) is provided with a central hole (13) that forms a snap location for the coupling ball. The hole

is located in a screw profile (15) that locates in a cover **panel** in order to attach it to the mounting plate. A taper flange (10) on the second coupling element has internal teeth (11) which interlock with protruding lugs (9) on the outside of the anchor element flange.

USE/ADVANTAGE - Anchor element for installation of cover **panel** on mounting plate allows for automatic installation.

(6pp

Title Terms: CLAD; FIX; SUPPORT; STRUCTURE; SNAP; BASE; COMPONENT; SEPARATE ; FLEXIBLE; HELIX; FIX; PLATE
Derwent Class: Q17; Q61
International Patent Class (Additional): B60R-013/02; F16B-005/02
File Segment: EngPI

19/5/18 (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX

004136287
WPI Acc No: 1984-281827/198445
XRPX Acc No: N84-210487
Fastening for vehicle panels **- has plastics bolt with nut having single thread pitch to aid extraction**
Patent Assignee: NIFCO INC (NIFC)
Inventor: MIZUSAWA A; NOTOYA Y
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4478545	A	19841023	US 82418167	A	19820914	198445	B

Priority Applications (No Type Date): US 82418167 A 19820914
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4478545	A		10		

Abstract (Basic): US 4478545 A
The fastening of plastics comprises a male member provided on its shaft with screw threads and a female member having at least one pitch of **spiral thread** on the inside surface of the **bore** . Apertured **panels** are fastened face to face by inserting the leg of the female member into apertures of the **panels** and subsequently, forcing the shaft portion of the male member into the bore of the female member.
The **panels** thus fastened can be separated by rotating the male member to threadably extract the male member from the female member.
ADVANTAGE - the fastener can be extracted for repeated use.
2/11
Title Terms: FASTEN; VEHICLE; **PANEL** ; PLASTICS; BOLT; NUT; SINGLE; THREAD; PITCH; AID; EXTRACT
Derwent Class: Q61
International Patent Class (Additional): F16B-013/06
File Segment: EngPI

19/5/22 (Item 22 from file: 350)
DIALOG(R)File 350:Derwent WPIX

003099710
WPI Acc No: 1981-K9758D/198143
Circular manhole cover and frame - uses oblique tapered ribs at say third points on cover perimeter and entering frame grooves via screw action
Patent Assignee: PONT-A-MOUSSON SA (CIEP)
Inventor: FREIN J L; OGER J F
Number of Countries: 006 Number of Patents: 009
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
BE 888288	A	19811005				198143	B
FR 2479873	A	19811009				198146	
GB 2075579	A	19811118	GB 8110416	A	19810402	198147	
DE 3112641	A	19820429				198218	
FR 2502209	A	19820924				198245	
GB 2075579	B	19840613				198424	
US 4499695	A	19850219	US 82357122	A	19820311	198510	
DE 3112641	C	19851128				198549	
IT 1143487	B	19861022				198830	

Priority Applications (No Type Date): FR 815400 A 19810318; FR 807664 A 19800404
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
BE 888288	A		16		

Abstract (Basic): BE 888288 A
The circular manhole cover and frame is for carriageway installation, using a thread to provide axial interlock. Oblique ribs at 120 degree intervals on the cover circumference form **spiral** ramps and act as screw **threads** , entering cover **bore** grooves (G) of the reciprocal form.
Ribs may have an isosceles trapezium shape in horizontal cross section, the faces subtending approximately 28 and 45 degrees respectively with the horizontal. The groove provides circumferentially offset ramps limited by faces in a common oblique diametrical **plane** . An alternative tongue may have a half round cross section.
Title Terms: CIRCULAR; MANHOLE; COVER; FRAME; OBLIQUE; TAPER; RIB; THIRD; POINT; COVER; PERIMETER; ENTER; FRAME; GROOVE; SCREW; ACTION
Derwent Class: Q42
International Patent Class (Additional): E02D-029/14; E03F-000/00
File Segment: EngPI

19/5/23 (Item 23 from file: 350)
DIALOG(R)File 350:Derwent WPIX

003066569
WPI Acc No: 1981-G6607D/198129
Plug for tube end - has central aperture in slit frusto-conical body for tightening screw
Patent Assignee: COMENS A B (COME-I)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
GB 1593379	A	19810715				198129	B

Priority Applications (No Type Date): GB 7654142 A 19761224
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 1593379	A		5		

Abstract (Basic): GB 1593379 A
The nut for insertion into a tube has a flat transverse section with a central **opening** (14) **helically** formed for mating with the **thread** of a screw. It has axial projections, peripheral portions at the ends of which are radially angled elements. They extend outward and in the same direction as the axial portions.
The edges of the elements remote from the transverse portion form the widest part of the nut. The axial portions engage the inside surface of the tube to keep the **plane** of the transverse portion at right angles to the axis of the tube, while the nut (18) is forced down the tube.
1
Title Terms: PLUG; TUBE; END; CENTRAL; APERTURE; SLIT; FRUSTO; CONICAL; BODY; TIGHTEN; SCREW
Derwent Class: Q61; Q67
International Patent Class (Additional): F16B-007/18; F16B-037/04; F16L-055/12
File Segment: EngPI

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Set     Items   Description
S1     606202   PLATE? ?
S2     810308   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3      24148   S2 (3N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL? OR OBLONG?)
S4     286363   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S5       8959   S4 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S6          1   S3 (10N) S5
S7          9   S3 (30N) S5
S8          9   IDPAT (sorted in duplicate/non-duplicate order)
S9          8   IDPAT (primary/non-duplicate records only)
S10     22115   2 (3N) (FOUR()SIDE? ? OR QUADRANGL? OR QUADRILATERAL? OR P-
             ARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQUARE? ? )
S11         1   S10 (10N) S5
S12    890211   CHANNEL? ? OR PIT OR PITS OR GAP OR GAPS OR SOCKET? ? OR F-
             URROW? ? OR GROOVE? ? OR SLIT OR SLITS OR TRENCH OR TRENCHES -
             OR CLEFT? ? OR DADO OR DADOES OR HOLLOW? ? OR RECESS OR RECES-
             SES
S13     30517   THREADED (3N)( SECTION? ? OR PORTION? ? OR S1EGMENT? ? OR -
             PART OR PARTS OR SECTOR? ?)
S14     15827   S12 (3N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL OR OBLONG?)
S15      7224   S12 (3N) (FOUR()SIDE? ? OR QUADRANGL? OR QUADRILATERAL? OR
             PARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQUARE? ? )
S16       136   (S14 OR S15 OR S13) (10N) S5
File 348:EUROPEAN PATENTS 1978-2006/ 200629
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060713,UT=20060706
         (c) 2006 WIPO/Univentio
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9/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00979440
Stent with reinforcing struts and bimodal deployment
Stent mit verstarkenden Streben und bimodaler Entfaltung
Stent avec supports renforces et a deploiement bimodale
PATENT ASSIGNEE:
Advanced Cardiovascular Systems, Inc., (456399), 3200 Lakeside Drive, Santa Clara, CA 95054-8167, (US), (Proprietor designated states: all)
INVENTOR:
Allen, Richard T., 2955 Ramona, Palo Alto, California 94306, (US)
Cox, Daniel L., 191 Washington Avenue, Palo Alto, California 94301, (US)
LEGAL REPRESENTATIVE:
McLeish, Nicholas Alistair Maxwell et al (74621), Boult Wade Tennant Verulam Gardens 70 Gray's Inn Road, London WC1X 8BT, (GB)
PATENT (CC, No, Kind, Date): EP 887051 A1 981230 (Basic)
EP 887051 B1 020417
APPLICATION (CC, No, Date): EP 98304961 980624;
PRIORITY (CC, No, Date): US 881059 970624
DESIGNATED STATES: BE; CH; DE; FR; GB; IT; LI; NL
INTERNATIONAL PATENT CLASS (V7): A61F-002/06
ABSTRACT WORD COUNT: 141
NOTE:
Figure number on first page: 8

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199853	923
CLAIMS B	(English)	200216	822
CLAIMS B	(German)	200216	771
CLAIMS B	(French)	200216	957
SPEC A	(English)	199853	4234
SPEC B	(English)	200216	4321
Total word count - document A			5158
Total word count - document B			6871
Total word count - documents A + B			12029

...SPECIFICATION dilatation catheter. The graft may be a wire mesh tube, a stainless steel tube with **rectangular openings** , or a tube with honeycomb style openings. Another prior art device includes a prosthesis for transluminal implantation comprising a flexible tubular body made of flexible thread elements wound together, each **thread** having a **helix** configuration.
There are still more conventional endovascular stents. In one design, the wire stent has...

...SPECIFICATION dilatation catheter. The graft may be a wire mesh tube, a stainless steel tube with **rectangular openings** , or a tube with honeycomb style openings. Another prior art device includes a prosthesis for transluminal implantation comprising a flexible tubular body made of flexible thread elements wound together, each **thread** having a **helix** configuration.
There are still more conventional endovascular stents. In one design, the wire stent has...

9/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00840590
TOOL WITH ADJUSTABLE HINGED HANDLES
WERKZEUG MIT EINSTELLBAREN, UNGELENKTEN ARMEN
OUTIL A BRANCHES ARTICULEES REGLABLES
PATENT ASSIGNEE:
BOST GARNACHE INDUSTRIES, (1815420), 83 avenue Pasteur, F-39600 Arbois, (FR), (Proprietor designated states: all)
INVENTOR:
LAURENCOT, Andre, L'Aigle, F-25110 Baume-les-Dames, (FR)
LEGAL REPRESENTATIVE:
Jacobson, Claude et al (41831), Cabinet Lavoix 2, Place d'Estienne d'Orves, 75441 Paris Cedex 09, (FR)
PATENT (CC, No, Kind, Date): EP 840666 A1 980513 (Basic)
EP 840666 B1 020220
WO 9704922 970213
APPLICATION (CC, No, Date): EP 96926442 960722; WO 96FR1152 960722
PRIORITY (CC, No, Date): FR 959357 950727
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS (V7): B25B-007/10
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): French; French; French
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200208	587
CLAIMS B	(German)	200208	584
CLAIMS B	(French)	200208	587
SPEC B	(French)	200208	2064
Total word count - document A			0
Total word count - document B			3822
Total word count - documents A + B			3822

...CLAIMS the other handle, the external surface of said spherical member (6) presenting at least one **helical** screw **thread** (15) which engages with a rack (13a, 13b, 14b) incorporated on each of the two opposing faces of the **oblong bore** , that the handle not incorporating the **oblong bore** has at least one circular bore, and that the various bores have dimensions and internal...

9/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00835269
Wiring harness assembling board
Drahtbundel-Montagebrett
Table d'assemblage d'un faisceau de filt
PATENT ASSIGNEE:
SUMITOMO WIRING SYSTEMS, LTD., (677372), 1-14, Nishisuehiro-cho, Yokkaichi City Mie 510, (JP), (applicant designated states: DE;FR;GB)
INVENTOR:
Suehiro, Shinichi, Sumitomo Wiring Systems, Ltd., 1-14, Nishisuehiro-cho, Yokkaichi-City, Mie, 510, (JP)
LEGAL REPRESENTATIVE:
Muller-Bore & Partner Patentanwalte (100651), Grafinger Strasse 2, 81671 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 773559 A1 970514 (Basic)
APPLICATION (CC, No, Date): EP 96117882 961107;
PRIORITY (CC, No, Date): JP 95289802 951108
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS (V7): H01B-013/00;
ABSTRACT WORD COUNT: 121

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB97	454
SPEC A	(English)	EPAB97	4195
Total word count - document A			4649
Total word count - document B			0
Total word count - documents A + B			4649

...SPECIFICATION The external thread portions 43 of the respective coupling shafts 42 are inserted through the **oblong holes** 35 of the fittings 33C, 33D secured to the rear surface 25b of the mirror member 25. Further, nuts 40 are **spirally** fitted to the external **thread** portions 43.

The tubular bodies 41 of the elevating shafts 31A, 31B are each provided...

...1a is adjusted by the angle adjusting mechanism 27 as follows.

First, the nuts 40 **spirally** fitted to the external **thread** portions 36, 43 at the leading ends of the pivoting shafts 30A, 30B and the elevating shafts 31A, 31B are loosened, making the mirror member 25 pivotal about the round **holes** 34 and **oblong holes** 35 of the L-shaped fittings 33A to 33D with respect to the coupling shafts...

9/3,K/4 (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00577269
Hospital Bed
Krankenhausbett
Lit d'hopitaux
PATENT ASSIGNEE:
STRYKER CORPORATION, (558082), 2725 Fairfield Road, P.O. Box 4085, Kalamazoo, Michigan 49003-4085, (US), (applicant designated states: DE;FR;GB;GR;NL)
INVENTOR:
BARTLEY, Gary, L., 3817 Stonegate, Kalamazoo, MI 49004, (US)
HADDOCK, Louis, A., Junior, 10899 Verona Road, Battle Creek, MI 49017, (US)
MESSNER, John, S., 3395 Beckley Road, Battle Creek, MI 49017, (US)
LEGAL REPRESENTATIVE:
Valentine, Francis Anthony Brinsley et al (37002), REDDIE & GROSE 16 Theobalds Road, London WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 573647 A1 931215 (Basic)
EP 573647 A1 950524
EP 573647 B1 990414
WO 9312750 930708
APPLICATION (CC, No, Date): EP 93903397 930104; WO 93US68 930104
PRIORITY (CC, No, Date): US 816826 920103
DESIGNATED STATES: DE; FR; GB; GR; NL
INTERNATIONAL PATENT CLASS (V7): A61G-007/00; A61G-007/012;
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9915	1711
CLAIMS B	(German)	9915	1852
CLAIMS B	(French)	9915	2022
SPEC B	(English)	9915	3877
Total word count - document A			0
Total word count - document B			9462
Total word count - documents A + B			9462

...SPECIFICATION 32 and 51. The drive gear 71 also has in one side of the central **opening** 73 a **rectangular** axial groove 74 which serves as a keyway.
An elongate, cylindrical, tubular outer screw member 77 is made of metal and has a **helical** **thread** 78 extending along its outer surface. The outside diameter of the screw member 77, including...

9/3,K/8 (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00416455 **Image available**
AXIAL MOVING PUSHBUTTON FOR A LOCK HAVING ROTARY LOCKING AND RELEASE MOTIONS
BOUTON-POUSSOIR A DEPLACEMENT AXIAL POUR SERRURE A VERROUILLAGE ET DEVERROUILLAGE PAR MOUVEMENT ROTATIF
Patent Applicant/Assignee:
MASTER LOCK COMPANY,
Inventor(s):
RUSSELL Charles C IV,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9806916 A1 19980219
Application: WO 97US14401 19970815 (PCT/WO US9714401)
Priority Application: US 96698063 19960815
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
BR CA CN MX AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 4768

Fulltext Availability:
Detailed Description

Detailed Description
... inward movement of the pushbutton is translated into rotary movement of this element by the **helical tracks** 68 on the pushbutton drive 62. As will be explained hereinafter, the turn bar will extend within a 4
rectangular slot within pushbutton 64 with the end result that axial movement of the pushbutton is translated...

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Set     Items   Description
S1     606786   PLATE? ?
S2     811086   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3     891125   CHANNEL? ? OR PIT OR PITS OR GAP OR GAPS OR SOCKET? ? OR F-
             URROW? ? OR GROOVE? ? OR SLIT OR SLITS OR TRENCH OR TRENCHES -
             OR CLEFT? ? OR DADO OR DADOES OR HOLLOW? ? OR RECESS OR RECES-
             SES
S4      30537   THREADED (3N)( SECTION? ? OR PORTION? ? OR S1EGMENT? ? OR -
             PART OR PARTS OR SECTOR? ?)
S5      46225   (S2 OR S3 OR S4)(5N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL?
              OR OBLONG?)
S6     286760   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S7       8966   S6 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S8     546860   PANEL? ? OR PLANE? ?
S9         16   S5 (30N) S7
S10        16   IDPAT (sorted in duplicate/non-duplicate order)
S11        15   IDPAT (primary/non-duplicate records only)
File 348:EUROPEAN PATENTS 1978-2006/ 200629
         (c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060720,UT=20060713
         (c) 2006 WIPO/Univentio
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11/5,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01918258
A proportioner
Dosiervorrichtung
Doseur
PATENT ASSIGNEE:
Bron, Dan, (264011), 39/47 Soroka Street, Haifa 34759, (IL), (Applicant designated States: all)
INVENTOR:
Bron, Dan, 39/47 Soroka Street, Haifa 34759, (IL)
LEGAL REPRESENTATIVE:
Patentanwalte Westphal, Mussgnug & Partner (100417), Am Riettor 5, 78048 Villingen-Schwenningen, (DE)
PATENT (CC, No, Kind, Date): EP 1548535 A2 050629 (Basic)
EP 1548535 A3 060329
APPLICATION (CC, No, Date): EP 2004029791 041216;
PRIORITY (CC, No, Date): IL 15961003 031228
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LI; LT; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; BA; HR; LV; MK; YU
INTERNATIONAL PATENT CLASS (V7): G05D-011/03
INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):
IPC + Level Value Position Status Version Action Source Office:
G05D-0011/03 A I F B 20060101 20050411 H EP

ABSTRACT EP 1548535 A3
The invention provides a proportioner (2) for the internal admixture, at a constant proportioning ratio, of an inflowing liquid additive to a liquid carrier, the proportioner including a first flow-attenuating means (12), and a second flow-attenuating (25) means, wherein the first and second flow-attenuating means are mechanically coupled and biased by biasing means (16) against the carrier inflow.
ABSTRACT WORD COUNT: 59
NOTE:
Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 050629 A2 Published application without search report
Search Report: 060329 A3 Separate publication of the search report
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200526	480
SPEC A	(English)	200526	2488
Total word count - document A			2969
Total word count - document B			0
Total word count - documents A + B			2969

...SPECIFICATION well, i.e., the attenuator 25, in the shape of an axial, slanting groove or **thread** -like variable-depth **helical** **groove** of a triangular or **rectangular** cross-section, can be placed or made along the outer surface of the stem 14...

11/5,K/8 (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00223779
Irrigation dripper.
Bewasserungs-Tropfkorper.
Emetteur d'irrigation.
PATENT ASSIGNEE:
Martin, Thomas Alexander, (807080), Sub 319, Peacevale of Sterkfontein 907 District Road 706 Natal, (ZA), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
Martin, Thomas Alexander, Sub 319, Peacevale of Sterkfontein 907 District Road 706 Natal, (ZA)
LEGAL REPRESENTATIVE:
Leale, Robin George et al , FRANK B. DEHN & CO. Imperial House 15-19 Kingsway, London WC2B 6UZ, (GB)
PATENT (CC, No, Kind, Date): EP 239699 A1 871007 (Basic)
APPLICATION (CC, No, Date): EP 86308742 861111;
PRIORITY (CC, No, Date): ZA 86855587 860124
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS (V7): B05B-001/02; A01G-025/02;
CITED PATENTS (EP A): US 2811392 A; AU 45584 A; US 3811621 A; US 4380318 A; GB 1366570 A

ABSTRACT EP 239699 A1
An irrigation dripper (10) has a screw threaded shank (12) terminating in a head (14). The shank (12) is tapered and has an axially extending groove or slit (18) along its entire length. Helical screw threads (16) are formed on the shank (12) which in use is fitted in a hole formed in a pipe (26). Water from the pipe (26) is discharged through the slit (18) for irrigating plants.
ABSTRACT WORD COUNT: 74

LEGAL STATUS (Type, Pub Date, Kind, Text):
Application: 871007 A1 Published application (A1with Search Report ;A2without Search Report)
Withdrawal: 881130 A1 Date on which the European patent application was deemed to be withdrawn: 880408
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	279
SPEC A	(English)	EPABF1	1018
Total word count - document A			1297
Total word count - document B			0
Total word count - documents A + B			1297

...SPECIFICATION The shank 12 is tapered towards the end remote from the head 14 and has **helical** screw **threads** 16 formed along its entire length. An axially extending **groove** or **slit** 18 of **rectangular** section and of gradually increasing depth is formed along the entire lenth of the shank...

11/5,K/15 (Item 15 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00168611 **Image available**
COVER ASSEMBLY WITH SPIRAL STORAGE GROOVES
ENSEMBLE DE COUVERTURE A GORGES DE STOCKAGE SPIRALEES
Patent Applicant/Assignee:
ROMANO Frank S,
Inventor(s):
ROMANO Frank S,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9002056 A1 19900308
Application: WO 89US3782 19890831 (PCT/WO US8903782)
Priority Application: US 88217 19880831
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AT AU BE CH DE DK FR GB IT JP KR LU NL SE
Main International Patent Class (v7): B60J-007/10
Publication Language: English
Fulltext Availability:
Detailed Description
Claims
Fulltext Word Count: 8306

English Abstract
A cover assembly for covering an opening comprising an articulated cover (20), mounted on a pair of tracks (21), and a housing (25) having a pair of spiral grooves (65) for receiving and storing the cover (20) in a spiral configuration. A high strength, weatherproof embodiment of the cover (20) comprises adjacently successively disposed panels (24) having a second semicylindrical edge portion (31) and a first, opposite semicylindrical edge portion (30) concentrically, rotatably received by an adjacent second edge portion (31); a plurality of rods (32) each inserted each cylindrical space concentric with adjacent edge portions (30, 31); and optionally, when covering vertical openings, open position-biasing springs (73). A low strength embodiment of the cover (20), for covering vertical openings, comprises panels (24) having an arcuate edge (132) and an opposite cylindrical edge (130) rotatably received by an adjacent arcuate edge (132).

French Abstract
L'invention concerne un ensemble de couverture destine a couvrir une ouverture, comprenant une couverture articulee (20) montee sur une paire de rails (21), ainsi qu'un logement (25) comportant une paire de gorges spiralees (65) destinees a recevoir et a stocker la couverture (20) dans une configuration spiralee. Un mode de realisation hautement resistant et etanche de ladite couverture (20) comprend des panneaux (24) disposes successivement adjacents comportant une seconde partie de bordure (31) semi-cylindrique ainsi qu'une premiere partie de bordure (30) opposee semi-cylindrique recue concentriquement de maniere rotative par une seconde partie de bordure (31), une pluralite de tiges (32) inserees chacune dans chaque espace cylindrique concentrique avec les parties de bordure (30, 31) adjacentes, et facultativement pour la couverture d'ouvertures verticales, un ressort (73) de prise en position ouverte. Un mode de realisation peu resistant de ladite couverture (20) pour des ouvertures verticales, comprend des panneaux (24) comportant un bord arque (132) ainsi qu'un bord cylindrique oppose (130) recu rotativement par un bord (132) arque adjacent.

Fulltext Availability:
Detailed Description

Detailed Description

... open position. The
slats were described as preferably in the form of a
U-shaped **channel** of generally **rectangular** outline.
Adjacent slats were preferably joined by upper, middle
and lower hinges thereby allowing the door to bend
through the curve of the **spiral track** . The slats were
strung on a cable such that applying tension to the slats
by...

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Set     Items   Description
S1    1316321   PLATE? ?
S2    1282288   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3       4978   S2 (3N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL OR OBLONG?)
S4     731825   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S5       1772   S4 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S6          0   S3 (10N) S5
S7          0   S3 AND S5
S8      37222   2 (3N) ((FOUR OR 4)()SIDE? ? OR QUADRANGL? OR QUADRILATERA-
             L? OR PARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQUARE? ? )
S9          1   S8 AND S5
S10        33   S2 (10N) S5
S11         0   S10 AND S1
S12   1704635   PANEL? ? OR PLANE? ?
S13         0   S10 AND S12
S14        20   AU=(CORDARO, N? OR CORDARO N?)
S15        19   S14 NOT PY>2002
S16         4   RD  (unique items)
File   2:INSPEC 1898-2006/Jul W2
         (c) 2006 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1969-2006/Jul W3
         (c) 2006 The Thomson Corporation
File   6:NTIS 1964-2006/Jul W2
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2006/Jul W2
         (c) 2006 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2006/Jul W3
         (c) 2006 The Thomson Corp
File  35:Dissertation Abs Online 1861-2006/Jun
         (c) 2006 ProQuest Info&Learning
File  65:Inside Conferences 1993-2006/Jul 20
         (c) 2006 BLDSC all rts. reserv.
File  73:EMBASE 1974-2006/Jul 20
         (c) 2006 Elsevier Science B.V.
File  74:Int.Pharm.Abs 1970-2006/Jun B1
         (c) 2006 The Thomson Corporation
File  92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
File  94:JICST-EPlus 1985-2006/Apr W3
         (c)2006 Japan Science and Tech Corp(JST)
File 144:Pascal 1973-2006/Jun W4
         (c) 2006 INIST/CNRS
File 155:MEDLINE(R) 1950-2006/Jul 19
         (c) format only 2006 Dialog
File 172:EMBASE Alert 2006/Jul 20
         (c) 2006 Elsevier Science B.V.
File 198:Health Devices Alerts(R) 1977-2006/Jun W1
         (c) 2006 ECRI-nonprft agncy
File 399:CA SEARCH(R) 1967-2006/UD=14504
         (c) 2006 American Chemical Society
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
File  95:TEME-Technology & Management 1989-2006/Jul W3
         (c) 2006 FIZ TECHNIK
File  71:ELSEVIER BIOBASE 1994-2006/Jul W3
         (c) 2006  Elsevier Science B.V.
File  91:MANTIS(TM) 1880-2006/Jan
         2001 (c) Action Potential
File 156:ToxFile 1965-2006/Jul W2
         (c) format only 2006 Dialog
File 159:Cancerlit 1975-2002/Oct
         (c) format only 2002 Dialog
File 162:Global Health 1983-2006/Jun
         (c) 2006 CAB International
File 164:Allied & Complementary Medicine 1984-2006/Jul
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16/5/1 (Item 1 from file: 5)

0013157647 BIOSIS NO.: 200100329486
Surface enhancements accelerate bone bonding to CPC-coated strain gauges
AUTHOR: **Cordaro Nicholas M** ; Szivek John A (Reprint); DeYoung Don W
AUTHOR ADDRESS: Orthopaedic Research Laboratory, Department of Orthopedic Surgery and Biomedical Engineering Interdisciplinary Program, University of Arizona, Tucson, AZ, 85724, USA**USA
JOURNAL: Journal of Biomedical Materials Research 56 (1): p109-119 July, 2001 2001
MEDIUM: print
ISSN: 0021-9304
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Calcium phosphate ceramic (CPC)-coated strain gauges have been used for in vivo bone strain measurements for up to 18 weeks, but they require 6 to 9 weeks for sufficient bonding. Osteogenic protein-1 (OP-1), PepTiteTM (a proprietary ligand), calcium sulfate dihydrate (CSD), transforming growth factor beta-1 (TGF-beta1), and an endothelial cell layer with and without TGF-beta1 were used as surface enhancements to accelerate bone-to-CPC bonding. Young male Sprague-Dawley rats were implanted with unenhanced and enhanced CPC-coated gauges. Animals were allowed normal activity for 3 weeks and then calcein labeled. Femurs were explanted following euthanasia. A gauge was attached with cyanoacrylate to the opposite femur in the same position as the CPC-coated gauge. Bones were cantilever-loaded to assess strain transfer. They were sectioned and stained with mineralized bone stain (MIBS) and examined with transmitted and ultraviolet light. Mechanical testing indicated increased sensing accuracy for TGF-beta1 and OP-1 enhancements to 105 +- 14% and 92 +- 12% versus 52 +- 44% for the unenhanced gauges. The PepTiteTM and the endothelial-cell-layer-enhanced gauges showed lower sensing accuracy, and histology revealed a vascular layer near CPC particles. TGF-beta1 increased bone formation when used prior to endothelial cell sodding. CSD prevented strain transfer to the femur. TGF-beta1 and OP-1 surface enhancements produced accurate in vivo strain sensing on the rat femur after 3 weeks.

REGISTRY NUMBERS: 10101-41-4: calcium sulfate dihydrate
DESCRIPTORS:
MAJOR CONCEPTS: Biochemistry and Molecular Biophysics; Biomaterials; Equipment, Apparatus, Devices and Instrumentation; Skeletal System--Movement and Support
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: Sprague-Dawley rat (Muridae)--male, young
ORGANISMS: PARTS ETC: bone--skeletal system, bonding acceleration, strain
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: calcium phosphate ceramic--biomaterial; calcium sulfate dihydrate; osteogenic protein-1 (OP-1); transforming growth factor beta-1
METHODS & EQUIPMENT: calcium phosphate ceramic-coated strain guage--equipment
CONCEPT CODES:
10060 Biochemistry studies - General
10511 Biophysics - Bioengineering
18004 Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry
BIOSYSTEMATIC CODES:
86375 Muridae

16/5/2 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0013038097 BIOSIS NO.: 200100209936
Strain transfer between a CPC coated strain gauge and cortical bone during bending
AUTHOR: **Cordaro Nicholas M** ; Weiss Jeffrey A (Reprint); Szivek John A
AUTHOR ADDRESS: Department of Bioengineering, University of Utah, 50 S. Central Campus Drive, Rm. 2480, Salt Lake City, UT, 84112, USA**USA
JOURNAL: Journal of Biomedical Materials Research 58 (2): p147-155 2001 2001
MEDIUM: print
ISSN: 0021-9304
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: The finite element method was used to simulate strain transfer from bone to a calcium phosphate ceramic (CPC) coated strain gauge. The model was constructed using gross morphometric and histological measurements obtained from previous experimental studies. Material properties were assigned based on experiments and information from the literature. Boundary conditions simulated experimental cantilever loading of rat femora. The model was validated using analytical solutions based on the theory of elasticity as well as direct comparison to experimental data obtained in a separate study. The interface between the bone and strain gauge sensing surface consisted of layers of polysulfone, polysulfone/CPC, and CPC/bone. Parameter studies examined the effect of interface thickness and modulus, gauge geometry, partial gauge debonding, and waterproofing on the strain transfer from the bone to the gauge sensing element. Results demonstrated that interface thickness and modulus have a significant effect on strain transfer. Optimal strain transfer was achieved for an interface modulus of approximately 2 GPa. Strain transfer decreased consistently with increasing interface thickness. Debonding along the lateral edges of the gauge had little effect, while debonding proximal and distal to the sensing element decreased strain transfer. A waterproofing layer decreased strain transfer, and this effect was more pronounced as the modulus or thickness of the layer increased. Based on these simulations, specific recommendations were made to optimize strain transfer between bone and CPC coated gauges for experimental studies.

DESCRIPTORS:
MAJOR CONCEPTS: Biomaterials; Models and Simulations--Computational Biology; Skeletal System--Movement and Support
BIOSYSTEMATIC NAMES: Muridae--Rodentia, Mammalia, Vertebrata, Chordata, Animalia
ORGANISMS: rat (Muridae)
ORGANISMS: PARTS ETC: cortical bone--skeletal system; femora--skeletal system
COMMON TAXONOMIC TERMS: Animals; Chordates; Mammals; Nonhuman Vertebrates ; Nonhuman Mammals; Rodents; Vertebrates
CHEMICALS & BIOCHEMICALS: calcium phosphate ceramic (CPC)
METHODS & EQUIPMENT: finite element analysis--analytical method
MISCELLANEOUS TERMS: CPC coated strain gauge-cortical bone strain transfer--bending effect; bone remodeling; strain gauge; strain measurement
CONCEPT CODES:
10511 Biophysics - Bioengineering
04500 Mathematical biology and statistical methods
10515 Biophysics - Biocybernetics
18004 Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry
BIOSYSTEMATIC CODES:

16/5/3 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

05198819 E.I. No: EIP99014522094
Title: Porohyperelastic finite element models for large arteries subjected to cyclic pressure
Author: Simon, B.R.; Liu, J.; Kaufmann, M.V.; **Cordaro, N.** ; Nichol, J.; Baldwin, A.L.
Corporate Source: Univ of Arizona, Tucson, AZ, USA
Conference Title: Proceedings of the 1998 ASME International Mechanical Engineering Congress and Exposition
Conference Location: Anaheim, CA, USA Conference Date: 19981115-19981120
Sponsor: ASME
E.I. Conference No.: 49454
Source: Advances in Bioengineering American Society of Mechanical Engineers, Bioengineering Division (Publication) BED v 39 1998. ASME, Fairfield, NJ, USA. p 257-258
Publication Year: 1998
CODEN: ASMBEP
Language: English
Document Type: CA; (Conference Article) Treatment: T; (Theoretical)
Journal Announcement: 9902W4
Abstract: Recent research in vascular mechanics has addressed deformation and mobile fluid flux in the arterial wall using poroelastic finite element models (FEMs) of undrained and steady-state conditions. However, arteries are subjected to pulsatile pressures and axial tethering. Very little attention has been given to cyclic (pulsatile) arterial wall response. We will use our porohyperelastic (PHE) theory, material properties, and the ABAQUS FE program (Version 5.6) to simulate coupled structural-fluid transport in intact and de-endothelialized rabbit aortas subjected to

`normal' as well as `hypertensive' idealized cardiac pressure cycles. (Author abstract) 3 Refs.
Descriptors: *Biomechanics; Blood vessels; Tissue; Elasticity; Deformation; Pressure effects; Pulsatile flow; Hemodynamics; Mathematical models; Finite element method
Identifiers: Porohyperelastic theory; Cardiac pressure cycles
Classification Codes:
461.3 (Biomechanics); 931.1 (Mechanics); 461.2 (Biological Materials); 631.1 (Fluid Flow, General); 461.1 (Biomedical Engineering)
461 (Biotechnology); 931 (Applied Physics); 421 (Materials Properties); 631 (Fluid Flow & Hydrodynamics)
46 (BIOENGINEERING); 93 (ENGINEERING PHYSICS); 42 (MATERIALS PROPERTIES & TESTING); 63 (FLUID DYNAMICS & VACUUM TECHNOLOGY)

16/5/4 (Item 1 from file: 35)
DIALOG(R)File 35:Dissertation Abs Online

01781975 ORDER NO: AADAA-I1399729
Accelerated bone bonding to calcium phosphate ceramic coated strain gauges: An experimental and computational study
Author: **Cordaro, Nicholas Michael**
Degree: M.S.
Year: 2000
Corporate Source/Institution: The University of Arizona (0009)
Director: John A. Szivek
Source: VOLUME 38/06 of MASTERS ABSTRACTS.
PAGE 1638. 147 PAGES
Descriptors: ENGINEERING, BIOMEDICAL
Descriptor Codes: 0541
ISBN: 0-599-77439-8

Calcium phosphate ceramic (CPC) coated strain gauges have been used for long term <italic>in vivo</italic> bone strain measurements but require 6 to 9 weeks for sufficient bonding. PepTite2000™, OP-1, TGF-•1, Ca₂SO₄·2H₂O, and an endothelial cell layer with and without TGF-•1 were examined as enhancements to accelerate bone to CPC bonding.

Young male Sprague-Dawley rats were implanted with gauges for three weeks and calcein labeled. Following euthanasia, their femurs were explanted and mechanically tested. Histology was completed. Optical Coherence Tomography (OCT) was studied as an alternative to histology. A finite element analysis (FEA) examined bone to gauge strain transfer.

Mechanical testing indicated increased sensing accuracy with TGF-•1 and OP-1 enhancements versus unenhanced gauges. PepTite2000™ and endothelial enhanced gauges displayed lower sensing accuracy and contained vasculature near CPC. TGF-•1 increased bonding with endothelial cells. Ca₂SO₄·2H₂O inhibited bone bonding. OCT unsuccessfully imaged bone to CPC contact. FEA identified geometric and material parameters for improved gauge design.

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Set     Items   Description
S1    1316394   PLATE? ?
S2    1282413   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3    3756580   CHANNEL? ? OR PIT OR PITS OR GAP OR GAPS OR SOCKET? ? OR F-
            URROW? ? OR GROOVE? ? OR SLIT OR SLITS OR TRENCH OR TRENCHES -
            OR CLEFT? ? OR DADO OR DADOES OR HOLLOW? ? OR RECESS OR RECES-
            SES
S4        877   THREADED (3N)( SECTION? ? OR PORTION? ? OR S1EGMENT? ? OR -
            PART OR PARTS OR SECTOR? ?)
S5      23573   (S2 OR S3 OR S4)(5N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL?
             OR OBLONG?)
S6     731876   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S7       1773   S6 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S8    1704799   PANEL? ? OR PLANE? ?
S9          0   S5 AND S7
S10     16070   (S2 OR S3 OR S5) (5N) (FOUR()SIDE? ? OR QUADRANGL? OR QUAD-
            RILATERAL? OR PARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQU-
            ARE? ?)
S11         3   S10 AND S7
S12         2   RD  (unique items)
File   2:INSPEC 1898-2006/Jul W2
         (c) 2006 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1969-2006/Jul W3
         (c) 2006 The Thomson Corporation
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         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2006/Jul W2
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File  34:SciSearch(R) Cited Ref Sci 1990-2006/Jul W3
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         (c) 2006 BLDSC all rts. reserv.
File  73:EMBASE 1974-2006/Jul 21
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File  74:Int.Pharm.Abs 1970-2006/Jun B1
         (c) 2006 The Thomson Corporation
File  92:IHS Intl.Stds.& Specs. 1999/Nov
         (c) 1999 Information Handling Services
File  94:JICST-EPlus 1985-2006/Apr W3
         (c)2006 Japan Science and Tech Corp(JST)
File 144:Pascal 1973-2006/Jun W4
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File 155:MEDLINE(R) 1950-2006/Jul 21
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File 198:Health Devices Alerts(R) 1977-2006/Jun W1
         (c) 2006 ECRI-nonprft agncy
File 399:CA SEARCH(R) 1967-2006/UD=14504
         (c) 2006 American Chemical Society
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
File  95:TEME-Technology & Management 1989-2006/Jul W3
         (c) 2006 FIZ TECHNIK
File  71:ELSEVIER BIOBASE 1994-2006/Jul W3
         (c) 2006  Elsevier Science B.V.
File  91:MANTIS(TM) 1880-2006/Jan
         2001 (c) Action Potential
File 156:ToxFile 1965-2006/Jul W2
         (c) format only 2006 Dialog
File 159:Cancerlit 1975-2002/Oct
         (c) format only 2002 Dialog
File 162:Global Health 1983-2006/Jun
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12/5/2 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03207782 E.I. Monthly No: EI9109107736
Title: Production of permanent joints by plastic flow.
Author: Monaghan, J.; Naughton, P.
Corporate Source: Trinity Coll, Dublin, Irel
Source: International Journal of Machine Tools & Manufacture v 31 n 3 1991 p 283-293
Publication Year: 1991
CODEN: IMTME3 ISSN: 0890-6955
Language: English
Document Type: JA; (Journal Article) Treatment: X; (Experimental)
Journal Announcement: 9109
Abstract: This paper presents the results of a series of tests involving the production of permanent joints between two metallic components. This was achieved by forging discs of aluminium onto shafts of copper, mild steel, alloy steel and titanium onto which grooves of various geometries had been machined. The **groove** geometries used included, **square** and triangular sectioned **grooves** , a **helical** screw **thread** and a knurled surface used in conjunction with the **square** and triangular shaped **grooves** . The influence of groove geometry on the degree of metal flow, or 'fill-out' into the grooves and the resulting joint strength under both axial and torsional loading was assessed for a range of applied forging loads. The relationship between the relative hardness of the disc and shaft material on the integrity of the joints formed was also investigated. The results obtained indicated that this plastic flow technique can be used to produce high strength permanent joints using relatively unsophisticated tooling. In addition the process lends itself to automation and could provide an inexpensive method of producing sound permanent joints. (Author abstract) 8 Refs.
Descriptors: *JOINTS--*Welded; ALUMINUM AND ALLOYS--Forging; COPPER AND ALLOYS--Welding; STEEL--Welding; WELDING--Dissimilar Metals
Identifiers: PERMANENT JOINT PLASTIC FLOW; ALUMINUM-COPPER JOINTS; JOINT AXIAL STRENGTH TESTS; JOINT TORSIONAL STRENGTH TESTS; FULL-OUT PLAIN GROOVES; PLASTIC FLOW TECHNIQUE
Classification Codes:
408 (Structural Design); 538 (Welding & Bonding); 541 (Aluminum & Alloys); 545 (Iron & Steel); 544 (Copper & Alloys); 931 (Applied Physics)
40 (CIVIL ENGINEERING); 53 (METALLURGICAL ENGINEERING); 54 (METAL GROUPS); 93 (ENGINEERING PHYSICS)

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Set     Items   Description
S1      28691   PLATE? ?
S2      68545   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3         73   S2 (3N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL OR OBLONG?)
S4      56162   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S5         55   S4 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S6          0   S3 (10N) S5
S7          0   S3 (30N) S5
S8        109   S2 (3N) (FOUR()SIDE? ? OR QUADRANGL? OR QUADRILATERAL? OR -
              PARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQUARE? ? )
S9          0   S8 (10N) S5
S10         0   S8 (30N) S5
S11         0   S2 (10N) S5
S12         0   AU=(CORDARO, N? OR CORDARO N?)
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         (c) 2006 ESPICOM Bus.Intell.
File 443:IMS Company Search 1982-2005/Q3
         (c) 2005 IMS Health & Affiliates
File 444:New England Journal of Med. 1985-2006/Jul W2
         (c) 2006 Mass. Med. Soc.
File 135:NewsRx Weekly Reports 1995-2006/Jul W3
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         (c) 2006 The HW Wilson Co.
File 149:TGG Health&Wellness DB(SM) 1976-2006/Jul W1
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File 369:New Scientist 1994-2006/Jul W1
         (c) 2006 Reed Business Information Ltd.
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Set      Items   Description
S1       28691   PLATE? ?
S2       68546   BORE OR BORES OR HOLE? ? OR OPENING? ? OR SLOT OR SLOTS
S3      105445   CHANNEL? ? OR PIT OR PITS OR GAP OR GAPS OR SOCKET? ? OR F-
             URROW? ? OR GROOVE? ? OR SLIT OR SLITS OR TRENCH OR TRENCHES -
             OR CLEFT? ? OR DADO OR DADOES OR HOLLOW? ? OR RECESS OR RECES-
             SES
S4         197   THREADED (3N)( SECTION? ? OR PORTION? ? OR S1EGMENT? ? OR -
             PART OR PARTS OR SECTOR? ?)
S5         250   (S2 OR S3 OR S4)(5N) (RECTANGLE? ? OR RECTANGULAR? OR OVAL?
              OR OBLONG?)
S6       56165   THREAD? ? OR THREADING? ? OR TRACK? ? OR TRACKING? ?
S7          55   S6 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S8     1399481   PANEL? ? OR PLANE? ?
S9           0   S5 (30N) S7
S10        403   (S2 OR S3 OR S5) (5N) (FOUR()SIDE? ? OR QUADRANGL? OR QUAD-
             RILATERAL? OR PARALLELOGRAM? ? OR RHOMBUS OR RHOMBUSES OR SQU-
             ARE? ?)
S11          0   S10 (30N) S7
S12       7443   RIB? ? OR RIBBING? ? OR PAWL?
S13          6   S12 (5N) (HELIX OR HELIXES OR HELICAL? OR SPIRAL?)
S14          0   S13 (30N) (S2 OR S3 OR S4)
File 158:DIOGENES(R) 1976-2006/Jun W1
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         (c) 2006 Mass. Med. Soc.
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